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B I O L O G I A  
CENTRAL-AMERICANA;

OR,

CONTRIBUTIONS TO THE KNOWLEDGE

OF THE

FAUNA AND FLORA

OF

MEXICO AND CENTRAL AMERICA.

EDITED BY

F. DUCANE GODMAN AND OSBERT SALVIN.

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**ARCHÆOLOGY.**

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By A. P. MAUDSLAY.

**APPENDIX.**

By J. T. GOODMAN.

LONDON:

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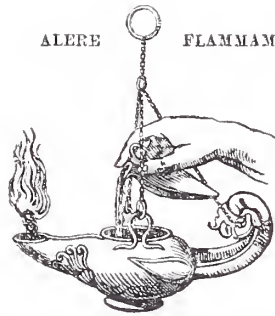
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B I O L O G I A  
CENTRALI-AMERICANA.

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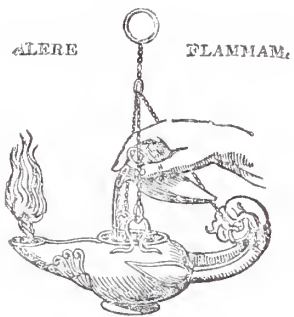
A R C H Æ O L O G Y.

APPENDIX:  
THE ARCHAIC MAYA INSCRIPTIONS.

BY  
J. T. GOODMAN.

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1897.



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RED LION COURT, FLEET STREET.



## PREFACE.



THE essence of these pages is an incomplete subdivision of a purposed volume which will contain, in addition, a review and estimate of the native civilizations, an analysis of the Maya codices, a reconstruction of the Yucatec and Cakchiquel calendars together with an alignment of the dates in their records with our chronology, and considerable other matter pertaining to the subject of undiscovered America. The work has been the slow outgrowth of years of patient toil; and many more toilsome years will be necessary to its completion. The appearance of this fragment now, in its unfinished state, is due to a request of Mr. Alfred P. Maudslay, who desires to have the chronological tables and some other matter herein contained put on record, so that he may be able to refer to them during the course of publication of his magnificent work on the archæology of Central America.

The foregoing statement is made less in excuse of the imperfection of this book than to afford opportunity for doing justice to Dr. Gustav Eisen of San Francisco, the absence of whose name in conjunction with mine on the titlepage will be a source of surprise to many of his friends. He was the first to direct my attention to the Maya inscriptions. For twelve years he has been intimately associated with me in the study of them, collecting most of the material I have had to work upon, and encouraging me to persist at the times I grew faint-hearted and ready to give up the apparently hopeless task. He has completed a series of careful drawings in which the glyphs are arranged in accordance with a plan of his own, and has in preparation an elaborate monograph on the Maya civilization, and much other cognate matter—all of which will constitute an important feature of the complete volume we have in view, but would be quite aside from the purpose of this preliminary issue.

There is a history attached to the printing of this fragment. Mr. Maudslay, during one of his visits to our coast, urged the importance of its publication upon some of the officials of the Californian Academy of Sciences; but, notwithstanding the princely endowment of their institution and their alertness to the scientific necessity of building a \$30,000 marble stairway and publishing a \$5,000 volume composed principally of their own portraits and biographies, they could not clearly see their way to any excuse for assuming the cost of printing this little book. It remained for Mr. E. DuCane Godman and Mr. Osbert Salvin, of London, to invite the publication of it at their private expense, and incorporate it, for all of its unworth, in their monumental work, the 'Biologia Centrali-Americana.'

It will be observed by those familiar with the study that I have paid little attention to the derivation of glyphs and less to the esoteric meaning supposed by many to attach to all Maya writings. I leave those branches of the subject to students whose minds have a recondite and mystic bent. To me the temporary significance of a glyph and the obvious purport of a text are sufficient. I do not undervalue etymologic research nor deny the possible employment of a cryptogramic style; but, until the surface meaning of the inscriptions is made out, I think it idle to seek for deeper ones. The mural and stelaic records, in my opinion, have nothing to do with Maya mythology or their other mysteries, further than that the numerals and time periods were themselves apotheosized and become objects of veneration. That deities and devils played an important part in the mummeries with which the priesthood beguiled the populace the accounts of the old Spanish writers leave no doubt; but, whatever purpose they served in religious ceremonies, they were not suffered then, more than now, to intrude into the domain of science. The Maya calendars, like all modern scientific creations, were godless affairs.

A final glance at the printed sheets, after they have gone beyond the reach of correction, impresses me with a sense that I seem at times to have spoken as one having authority. Nothing could be farther from my intention than the assumption of such a rôle. Contemplating the important and grave nature of the subject, I feel humility at having raised my voice at all. But if I, an illiterate proletaire, have chanced to speak unbonneted in the presence of the illustrious scientific world, it was not through any assurance of prerogative, but simply by right of knowledge gained



during years of servitude to the glyphs. If in time to come, however, the scientists shall find themselves pushed rudely from their stools by irreverent outsiders, the fault will be their own. For quite half a century they have had this study almost exclusively to themselves. The material by which alone it could be prosecuted was practically in their keeping, sealed to the rest of the world as though it were a hieratic mystery. And what has been the result? A deal of learned and pompous kowtowing to each other, but not a single substantial gain toward bottoming the inscriptions. While I have been preparing these pages for the press Mr. Maudslay has received a letter from a distinguished Professor in the National Museum at Washington directing his attention to a discrepancy between a photograph and drawing in his work as to which toes the sandal-string passed between, and requesting him to make a public explanation of it—just as if it made any difference. Yet this fairly illustrates the gauge of the men who have been trifling with this great problem. They are a lot of shoe-string scientists. It is manifest that we look hopelessly to them for a solution of the momentous enigma.

But if I have lost confidence in the ability of learning, I retain faith in the genius of ignorance. Somewhere to-day, by an obscure fireside, sits a boy that never saw even the outside of a university or academy of sciences to whose penetrative mind these inscriptions would be as an open book. It is my earnest desire that they be brought before him—in other words, that the study may become popularized instead of being confined to an exclusive and incompetent few. The publication of Maudslay's work is the first decided step in that direction. The lack of material for purposes of investigation and comparison was the most serious drawback I labored under for years. Those who had it appeared greedy of its possession and afraid to share it with others, lest some one should get the start before they themselves had been inspired with an insight into the meaning of the glyphs. It was not till Maudslay undertook the reproduction of the inscriptions, and, with a generosity entirely exceptional in my experience with archæologists, distributed them broadcast to the world, that I could collect data enough to make any substantial progress. He deserves the gratitude of every one interested in American antiquity. It is to discharge somewhat of my personal obligation to him and at the same time contribute my mite toward the success of his great undertaking that I have consented to let this study appear before I have had time to work out the details which are alone necessary to its completion.

The illustrations in these pages are by Miss Annie Hunter, who has done nearly all the drawing for Maudslay's series of publications. Her experience and artistic skill render her reproductions faultless. The certainty with which she can trace the glyphs of a nearly obliterated inscription amounts almost to divination. No mere perfunctory discharge of duty satisfies her; her whole soul is in her work, aquiver with anxiety to attain the best and truest result. Students who have not had an opportunity for comparing the mutilated originals with her perfect restorations will never know the full debt they owe this admirable artist.

I have expressed here some of my obligation to the living, and elsewhere to Landa among the dead; but there is another shade to whom I feel the greatest debt of all—Brasseur de Bourbourg. Without his research Landa's work and a hundred other essential aids to the study would be unknown, and without the stimulating effect of his writings I should never have persevered in it. It has become fashionable with the school of dilettanti that has succeeded him to speak lightly of Brasseur; but he was the grandest of them all—the only one to whom I uncover. He belonged to the old Leonardo da Vinci and Michael Angelo type—the Herculean mold—men who achieve in a dozen different lines what we incompetents are incapable of accomplishing in a single one. No advance can be made in any branch of the study but he supplied all the preliminary stepping-stones. He was to its bibliology what Maudslay is to its archæology. What if he went astray at times? He was delving single-handed, but with a zeal that will never be equaled, in the vague of an unexplored past. What if he mistook the meaning of some of the treasures he exhumed? No one else would ever have dragged them from their crypts to turn the glare of even a misfocused searchlight upon them. If he could only live to-day in the fuller light he was chiefly instrumental in creating! His fevered life just missed its triumph. The fore-shadowed discovery that should place him in absolute ascendancy never came; but generous hearts will not the less do homage to the ardent soul that departed crownless from a scene resplendent with regal promises.

ALAMEDA, CALIFORNIA,  
November 1, 1895.

J. T. G.

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## EXPLANATORY.

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### MAYA AND MAYAN.

THE adjectival term Maya, instead of Mayan at times, is employed throughout this book. The nice distinction, which it is sought to bring into vogue, of applying the former only to matters pertaining to Yucatan and using the latter only with regard to affairs relating to the race in general, appears to me ill-advised and liable to result in confusion. I think it would be better to distinguish the separate developments by the terms Yucatec, Tzental, Chiapec, Cakchiquel, and so on, as far as they can be thus intelligibly designated, retaining the adjective Maya alone, as the simpler form, and employing it solely in a generic sense. Hence, not knowing what particular designation to give the authors of the inscriptions, I have simply applied the broad racial appellation to them, and used the single term Maya adjectively throughout.

### SYSTEM OF NOTATION.

To particularize every separate period by name in setting down dates or chronological reckonings, especially when the requirement is frequent and the record long, becomes tedious, and the result is not readily comprehensible. Thus, to write: the 9th cycle, 12th katun, 18th ahau, 5th chuen and 16th day, to 2 Cib, the 14th day of Mol, is not only laborious, but the eye does not take it all in at a glance. To obviate both objections I have long made use of a system of notation that combines the advantages of facility and comprehensibleness. By it the above record would be reduced to this: 9—12—18—5  $\times$  16—2 Cib—14 Mol. The cross between the chuens and days renders the identity of all the periods unmistakable. When there are no days or chuens, or even ahaus—a fact denoted by the use of the extreme numeral for the period in question—the plan is still adhered to, as in the inscriptions themselves—thus: 9—15—20—18  $\times$  20—4 Ahau—13 Yax. This system of notation will be made use of throughout these pages.





# THE ARCHAIC MAYA INSCRIPTIONS.

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## INTRODUCTION.

IN any attempt to deal with Maya chronology it will be found expedient to arrange the subject under several separate heads in order to avoid confusion, as different systems prevailed not only at different centers of their civilization, but varying styles were concurrently made use of in the same place. The three most radically differing systems are the Yucatec, Cakchiquel, and the more ancient one of Palenque, Copan, Quirigua, Menché, Tikal, and probably other cities of the great central region. For lack of a more specific descriptive title—the calendar corresponding with that of no existing people—I have given to this last system the designation of the Archaic Maya calendar.

### THE YUCATEC SYSTEM.

The Yucatec system can be restored only from the chronicles, as not a single legible date, so far as I know, has yet been found among any of the ruins of the peninsula. These chronicles are not very satisfactory material to work upon. They have come down to us mutilated and full of errors, yet enough is ascertainable from them to substantiate Landa's imperfect exposition of the Yucatec chronological scheme and enable us to supplement somewhat the information derived from him.

The year consists of 365 days, beginning successively with Kan, Muluc, Ix, and Cauac. The ahaus consists of 360 days, the katun of 20 ahaus, or 7,200 days, and the cycle of 13 katuns.

The principal respects in which the Yucatec system differs from the Archaic are these: the year begins with Kan, Muluc, Ix, or Cauac, instead of Ik, Manik, Eb, or

Caban; chronological reckoning commences with Ymix instead of Ahau; computation is to the end of a period instead of the beginning of a new one; the katuns are designated by the day number of the Ahau with which they terminate instead of being numerated in arithmetical order; the cycle consists of thirteen katuns instead of twenty. It may be that this last difference is only apparent. Additional data may show that there was a cycle of twenty katuns besides the 13-katun count. The manner of numerating the katuns is the chief objection to this theory, but different styles of numeration may have characterized the two counts.

Starting with 1 Ymix, which Landa informs us was the initial point of reckoning, the ahaus succeed each other as follows:—9, 5, 1, 10, 6, 2, 11, 7, 3, 12, 8, 4, 13, 9, 5, 1, 10, 6, 2, 11, and so on in endless rotation. The twenty ahaus in a katun are numbered arithmetically, an event being spoken of as occurring in the tenth or fifteenth aha, or while six ahaus are yet wanting to complete the katun. Taking the day numbers of the twentieth aha, which constitute the katun numbers, it will be seen that they succeed each other as follows:—11, 9, 7, 5, 3, 1, 12, 10, 8, 6, 4, 2, 13. The eleventh was the first and the thirteenth the last, as is clearly indicated by the initial date and katun-wheel given by Landa. The statement of Perez that the thirteenth was the first was probably based on a confused notion of the numbering of the cycles in the Archaic scheme—if, indeed, there may not have been a similar usage in the Yucatec system.

Another source of confusion in the Yucatec chronicles, quite as misleading as the mutilation and errors, is the fact that in different ones time is computed from at least three, and probably four, separate starting-points. I think it likely that each of the four ruling houses—the Itzas, Cocoms, Xius and Chels—had a chronology of its own, though using a common annual calendar, the result being that mention of the same event by members of the different houses would assign its occurrence to different ahaus and even katuns.

Certain dates given in the chronicles and manuscripts enable us to align the Yucatec chronologies with ours; but this is of little service beyond dates nearly contemporaneous with the arrival of the Spaniards, as the records relating to remoter events are too broken and confused to be relied upon with anything like certainty.

### THE CAKCHIQUEL SYSTEM.

This anomalous calendar is a deduction from the Annals of the Cakchiquels, a document written by a member of the Xahila, one of the royal families, just after the Spanish conquest. Unsatisfactory as the record is in not more fully elucidating the Cakchiquel system, it is important as upsetting all accepted theories of Maya chronology.

The year consists of 366 days. It follows necessarily that there must be ten dominical days instead of four, and that it requires 130 instead of 52 years to complete the calendar. The chronological year (so called, though undoubtedly both that and the so-called cycle were otherwise designated) consists of 400 days, divided into 20 periods of 20 days each. Twenty of these years make a cycle. There is nothing in the chronicle to indicate the character or length of periods greater than that.

The year consisting of 366 days it necessarily results that its beginning can have no fixed date relative to solar or terrestrial phenomena, but must revolve regularly through the seasons. This accounts for the diversity among the old writers as to the time the Cakchiquel year began. Each gives a different date. It will no longer be necessary to attempt to discredit or reconcile their statements, for the year at some time began not only with the various dates alleged by them but with every other one of the 366 days. The only interest which can hereafter attach to their statements will be that they reveal the dates at which the respective writers obtained their information.

With a revolving New Year no bissextiles were required to keep the calendar adjusted to the annual solar recurrences. The count of days ran on regularly without any intercalations or excisions. The year might begin at the summer or winter solstice, at the vernal or autumnal equinox, or at any other period; yet two things about it were fixed—it always had 366 days, and it always began with the first day of the month Tacaxepual. Its fixity in these regards enabled me to discover its true character; hence I have a respect for even that small amount of stability in it.

### THE CODICES.

The Dresden codex pertains to the Archaic system in the main, though reckoning twenty cycles to the great cycle; the Troano and Cortesianus to the Yucatec; the Peresianus—though too mutilated and fragmentary to base a definitive opinion upon—most likely to an older Tzentel form, which had a considerable affinity to the Archaic. None of them, however, can be of much assistance in solving Maya historical problems, as they are all merely text-books explaining the meaning of signs, the elementary principles of their respective calendars, and certain phases of lunar, solar, and, in a few places, bissextile and chronological reckoning. I believe the figures usually supposed to represent deities to be only personifications of different periods or phases of time, and that most of the glyphs are merely numerals, or symbols used for the occasion in their numerative sense only. This belief will appear less extravagant after an examination of the face numerals, and other series, given farther on.



### THE ARCHAIC SYSTEM.

It is to Palenque, Copan, Quirigua, Menché, Tikal, and other cities yet to be unearthed in that great center of highest, if not original, Maya civilization that we must look for data to solve the problem of prehistoric native culture. From that field has already come the best and most reliable material the student has to work upon. M. Désiré Charnay, under commission from the French Government, performed noteworthy service in procuring photographs and molds of inscriptions from some of the cities mentioned; but his performance has been far surpassed, both in range and accuracy, by that of Mr. Alfred P. Maudslay of London. By his unaided individual effort Mr. Maudslay has laid students of Maya archæology under the deepest possible obligation. Too much credit cannot be awarded him for the zeal and thoroughness with which he has pursued his explorations, or for the skill and care he has exhibited in the publication of the results. Thus, through the enthusiasm and painstaking of a private gentleman, the material for study from that field already exceeds in value the combined collections from all other sources, and it is devoutly to be hoped that in the near future it will be steadily augmented by extensive systematic excavation under the patronage of government or scientific bodies.

Such organized and exhaustive exploration is the more to be desired for the reason that all the inscriptions so far brought to light are of a purely chronological character, destitute of any real historical importance. They are merely public calendars, as it were, showing that at specified dates certain periods of their scheme would begin or end, or that a correspondence would occur between two or more of their different plans for computing time. Aside from the circumstance that the initial date in most instances undoubtedly marks the time at which the temple, stela, or altar to which it belongs was erected, I do not believe there is the record of a single historical event in all the inscriptions at present in our possession. That a people as cultured as they should have had no historical records at all would be a presumption too absurd for credence, even without the direct testimony of the early Spanish authorities to the contrary. The actual question is whether any of them will ever be discovered. If they were inscribed upon paper or parchment and buried with their priestly owners, as we are told, there is very little hope that any vestige of them remains, unless there may have been some instance of almost miraculous preservation. Still, that remote chance is worth a vast amount of search. But a better hope, whose possible realization lies solely in the same line of research, is that in crypts or tombs or other unexplored receptacles may be collected historical tablets of durable material—stone, stucco, baked clay, or even metal—which patient excavation will yet unearth.

But, though deeds and occurrences that give pomp and circumstance to history are

nowhere blazoned in the inscriptions, it must not be supposed that these records are entirely unprofitable. They enable us to restore practically the whole scheme of Maya chronology. The minimum duration, at least, of the flourishing state of each city is shown by the extreme dates of its monuments, and by similar comparison is to be ascertained the relative eras of the palmy days of the different cities.

But a circumstance more important than the duration or comparative ages of cities is revealed by the inscriptions. One of the most momentous events that could transpire in the history of a people occurred in the very heart of the period chronicled. We Americans, with our anniversary craze, who lie in wait to celebrate the least significant event, who strutted in pride at our own centenary and but recently went wild over a lot of mere quadru-centennials, should be able to appreciate somewhat the feeling that must have stirred our equally excitable forerunners on that occasion. All the centennials that we in our most gorgeous dreams might hope to celebrate would fade to insignificance beside that great Maya event—the observance of the 280,800th year of their era. The date was 4 Ahau—13 Yax, the beginning of the 15th katun of the 9th cycle of the 54th great cycle. Nearly all the other dates in the inscriptions of Copan and Quirigua either lead up to or recede from it. It was the beginning of the last quarter of their grand era—the completion of which, it is perhaps needless to say, they did not as a nation live to see; nor shall we, nor the other peoples exulting to-day in pride of nationality, nor any nation to come, until our civilization shall be as much a story that is told as theirs is now, and our cities and temples and palaces are ruins as complete and mysterious as those of Quirigua and Copan. The grand era during which they flourished must still have more than 90,000 years to run. Back of ten thousand years all is oblivion.

But if this remnant of their grand era bids fair to stretch out to the crack of doom, what is to be said of the 280,800 years that had elapsed when the record was made? It is incredible that they could have been dating from any historical epoch, even allowing tradition its most exaggerated play. There is no warrant for supposing that through inspiration or otherwise a day became to their sight as a thousand years. No necessity of their chronological scheme required that it should antedate the time of its adoption. How account, then, for such an immense period? I confess myself baffled by my own question. The most reasonable answer that suggests itself is that they had a juster appreciation of the antiquity of the earth than most nations have had and that they began their chronology with the supposed date of its creation. The statement of the Aztec historian Ixtlilxochitl that in the year 5097 from the creation of the world an assembly of learned men met at the city of Huehuetlapallan and determined the reckoning of the years, days, and months, leap-years, and intercalary days, in the order in which they were found at the time of the conquest; and the information derived from native sources by Veytia that in the year of the world 3901

a great convocation of astrologers met to correct the calendar,—while not to be relied upon for historical accuracy, yet tend to confirm the supposition that the native races assumed to commence their chronology with the creation of the world.

If, as is probable, a more satisfactory answer should be found by many in the assertion that I am in error as to such an era, and I be asked how I know that it exists, my reply would be that it is self-evident. Its existence is established by all the certainty of mathematical demonstration. The evidence of the inscriptions does not go hand in hand with us to the ultimate destination, but it leads us far on the journey, and leaves us only when it has pointed out an unmistakable way to the final goal, which an intellectual necessity compels us to reach before we can rest satisfied. The inscriptions show us that every separate chronological period must be rounded out to completeness before the calendar itself can be complete. We see the years, *ahaus*, and *katuns* come back to their respective starting-points, thus rounding out the periods of which they are the units. Of necessity the cycles and great cycles must do the same, else the system would be an incomplete creation, without form and void. No fair-minded person, I think, will contend that the Mayas elaborated almost to its conclusion a design not only susceptible of but inviting the most perfect finish and then wilfully or blindly left it disproportioned and awry. If they did not do this—a thing alien and repugnant to human nature—then their grand era embraces 374,400 years. There are two unmistakable indices pointing to this conclusion. The moment the cycle and great cycle appear upon the scene we know by the unchangeable law governing the calendar that they must go forward until they commence again with the same date from which they started. Such a result in the case of the former requires 949 cycles, and in that of the latter 73 great cycles—each of which reckonings constitutes a period of 374,400 years.

If it should be further asked how I know that just three-quarters of this period had elapsed at the time of the Copan and Quirigua record, my answer would be that, though unable to demonstrate it absolutely, not knowing the precise value of all the factors, I am morally certain of it, for the following reasons:—By another unvarying law governing the construction of their calendar all the periods of the chronological scheme are made to conform to the 13-katun standard, some completing their round or rounds in a single count and the rest in different multiples thereof. An examination of the various inscriptions in which the date 4 Ahau-13 Yax occurs shows that more than fifty distinct periods are associated with it. I am yet unable to prove their values beyond a question, but I know they are all measures of time and that all of them begin with that date. The minor chronological periods cannot possibly amount to that number. To account for so many time-measures worthy of record it is necessary to ascend to the larger *ahau* and *katun* counts; when that is done, it becomes imperative, in the absence of specific numbers, to deal with them in their full rounds. Therefore, if 4 Ahau-13 Yax, the beginning of the 15th katun of the 9th cycle, be the



commencement of a 13-katun period—of which I have not a particle of doubt—the era must extend backward until by stages of 949 katuns (the number in a grand round) the beginning of a great cycle is reached. A simple table will most clearly show the result.

BEGINNINGS OF THE KATUN ROUNDS IN A GRAND ERA.

No. of Rounds.	Katuns.	Great Cycles.	Cycles.	Katuns.
1.	949	3	..... 8	9
2.	1,898	7	..... 3	18
3.	2,847	10	..... 12	7
4.	3,796	14	..... 7	16
5.	4,745	18	..... 3	5
6.	5,694	21	..... 11	14
7.	6,643	25	..... 7	3
8.	7,592	29	..... 2	12
9.	8,541	32	..... 11	1
10.	9,490	36	..... 6	10
11.	10,439	40	..... 1	19
12.	11,388	43	..... 10	8
13.	12,337	47	..... 5	17
14.	13,286	51	..... 1	6
15.	14,235	54	..... 9	15
16.	15,184	58	..... 5	4
17.	16,133	62	..... 0	13
18.	17,082	65	..... 9	2
19.	18,031	69	..... 4	11
20.	18,980	73	..... 0	0

The table is made to cover the entire grand era, in order to show that at no point but the start does the beginning of a katun round correspond with that of a great cycle, and that in the 54th great cycle only does the round begin with the 15th katun of the 9th cycle. This showing is conclusive to my mind as fixing the position of the date in question. That position accords with a pre-existing requirement of the calendar; it fulfils a conjuncture of cycle and katun dates against odds of thirteen to one; it explains why the occasion was regarded as of such great importance; and it



accounts for the extraordinary number of periods beginning with the date as nothing else I have been able to conjecture can.

I look upon the Maya chronological scheme as ranking among the most marvelous creations of the human intellect. From what humble origin it rose, or through what crude stages it passed, we shall never be able probably to discover. It appears before us only in its matured state—complete, perfect, and altogether admirable, a system of exact detail and perpetual range. Its methods of computation may appear involved and awkward to us who are accustomed to the simple arithmetical progression of the days and years; but I have yet to learn that many existing nations regard their arbitrary weights, measures, and money systems as less perfect than the metric and decimal ones. Were argument necessary, the Maya system is more defensible than theirs. Facility of reckoning is not so much a matter of different methods as of familiarity with some particular method.

The Maya mathematical system is a vigesimal one. Everything goes by scores. Their numeration ascends by multiples of twenty from 1 to 20, to 400, to 8000, to 160,000, to 3,200,000, to 64,000,000, and so on. This vigesimal system appears to me sufficient in itself to explain all the peculiarities of their calendar. Much speculation has been wasted on the number 13, which plays such an important part in their time-reckoning. Don Pio Perez surmised that its use originated from observation of the number of days the moon appears to increase and diminish; Brasseur de Bourbourg supposed that it may have been a sacred number before the invention of the calendar, being, according to him, the number of gods of high rank; while others have indulged in equally far-fetched conjectures to suit theories of their own. I see no necessity for all this, more than for other strained conjectures to account for self-evident facts. The old Maya scientists probably did not handicap themselves with puerile fancies and sacred mysteries any more than do their scientific brethren to-day. It is likely that, according to their lights, they went just as irreverently and directly to their objective points. Superstition, divination, mystery, became associated with their calendar, as at different times and places they have with the bible, hymn-book, and almanac; but they were ignorant aftergrowths, not of the essence of its construction. Whatever of sacredness may ever have attached to numbers is far more likely to have originated from the wonders wrought by them in the calendar than from any prior association.

Missing the plan of simple progression in their chronology, as more enlightened nations have missed it, the Mayas proceeded to construct one based on their vigesimal system. The twenty cardinal days, the twenty days in a month and chuen, the twenty ahaus in a katun, the twenty katuns in a cycle, and the progression by twenties of other periods of the calendar, are conclusive evidence of such a design. But it is impossible to construct a calendar in keeping with solar phenomena upon a purely vigesimal or decimal system, as the Maya and Vendemiare schemes—between which there are many curious resemblances—fully prove. The continuity of reckoning by

either plan must be broken to meet the exigencies of the solar course ; and when, as in the Maya system, the first necessary interruption leads to a scheme of chronological reckoning by periods other than years, succeeding irregularities are required to keep the two calendars in touch from time to time and bring, after their vast sweep, all the periods that have successively grown out of the diverging styles harmoniously back to the common starting-point. The Mayas discovered that 13 was the most available number to use in connection with 20 for these purposes, hence its adoption ; but wherever it appears throughout the whole scheme it is always subordinate to its imperial consort. Either, however, would be ineffectual without the other. It is in their combination that the Maya genius is shown—a genius that in remote isolation elaborated a chronological system whose perfection cannot fail to excite our admiration and wonder though standing in the focused light of all the ages and civilizations.

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## THE ARCHAIC CALENDARS.



A STATEMENT of how I came to hit upon the secret of the ahan and katun count and subsequently succeeded in reconstructing the outlines of the entire Archaic system, is not only due to fellow-students, but may not be without interest to the general reader; and at no point could it be more pertinently given than as an introductory clause to this section.

The construction of an Archaic annual calendar was not a very difficult work. Landa had given an example of a Yucatec one, and it only remained to make a change in the arrangement of the days to achieve its Archaic counterpart. But, simple as this task seemed, I was for a long time baffled in its accomplishment. The month numbers of the days appeared to indicate that the dominicals were Akbal, Lamat, Ben, and Ezenab; but trial of a calendar constructed upon that theory proved it to be wrong. It was not until I discovered that the first day of the month was numerated 20 in the Archaic system, and that consequently the dominicals were Ik, Manik, Eb, and Caban, that I succeeded in constructing an annual calendar which met all the requirements of the dates. I made Ik the initial day for no other reason than that it is nearest to Kan, the Yucatec initial; but, from the prominence given to Caban in the inscriptions and the frequency with which it occurs, I have grave doubts if that day should not occupy the place of pride. The question is of little moment, however, as the annual calendar is simply an endless rotation of days in regular order, and for all practical purposes it does not matter where it begins.

The building of the chronological calendar was a quite different and far more difficult affair. I labored at it for seven years without discovering anything except that I was wrong. But that was a great deal. Others who have been working at it for a much longer period have not yet made even that discovery.

The man who led everybody astray—misguiding enough of effort to have solved the problem twenty times over had it been properly directed—was Don Pio Perez. He undoubtedly knew much about the Maya methods of reckoning time, but he assumed to know more than he really did. In the absence of any regularly ordained authority, he was at once accepted, on his own bare assumption, as a leader and lawgiver; and

then began that journey through the wilderness which has lasted more than forty years without any of his devout followers having even caught sight of the promised land. I ran in the ruck for seven seasons before becoming satisfied that the pretended oracle was an impostor. Then I turned and went back to Landa—to whom all desirous of reliable information concerning Maya chronology must go at last.

It is a signal instance of the irony of fate that this bigoted destroyer of the fruits of Maya science and art—the pietist whose zeal rendered him avid of the obliteration of every vestige of their impious learning—should have been the only one to leave a clew by which the mysterious codices and inscriptions will yet be deciphered. Nevertheless he left such a clew—slight and vague, it is true; but, when carefully followed up, it broadens and leads into an open way where everything will presently become self-evident.

It is not necessary to reproduce in full Landa's information regarding the Maya calendars. I will give only the formulation I made of its substance when I went back to invoke him as an instructor:—

1. A day of 24 hours was the unit of the annual count.
2. There were twenty distinct days, designated by different signs, four particular ones coming invariably in place to serve as dominicals.
3. Twenty days, numerated from 1 to 13 in sequent continuity, constituted a month.
4. Eighteen months, distinguished by different characters, plus five days, constituted a year.
5. The year consisted of 365 days and 6 hours, the extra hours being counted as a day every four years, making a year of 366 days. [NOTE.—These extra days could not have been introduced into the calendar without crowding the dominicals from their places.]
6. The year reckonings, formed according to the foregoing method, arranged in succession until the same dominical with identical day and month numbers was reached (which would be fifty-two years), constituted the complete annual calendar.
7. For chronological purposes a different style of reckoning was employed. The count was by thirteen 20-year periods, called katuns, which ran irregularly, being designated by the numbers of the day Ahau, in the following sequence:—11, 9, 7, 5, 3, 1, 12, 10, 8, 6, 4, 2, 13. [NOTE.—The numbers of the day Ahau at twenty-year intervals do not succeed each other in this order.]
8. The calendar [NOTE.—It must have been a separate chronological one, as it could not possibly be the annual] did not begin with the first day of the year, but with 1 Ymix, which was without fixed date, each one regulating his own reckoning.

The foregoing is Landa's information respecting the calendars, as I boiled it down for my own use. It will be seen that I annotated some of the paragraphs. One note relates to the impracticability of introducing bissextiles into the annual calendar without deranging the whole plan; the others, to the probable existence of a separate chronological calendar, and an inconsistency or error in one of the statements regarding it. The possibility of unraveling the great katun mystery appeared to me to be



involved in the latter clauses; therefore I chose them as a starting-point for my attempts at a solution. It was safe to begin with 1 Ymix, because Landa explicitly denoted that day to be the commencement of a calendar of some sort.

Ymix is the day following Ahau; hence, I reasoned to myself, if a period begin with the former it must terminate with the latter; moreover, 1 succeeding 13 in the day count, if 1 Ymix begin a period, 13 Ahau must end it; and, further, this period being composed of thirteen lesser ones of twenty years each, it is at a distance of two hundred and sixty years apart in the annual calendar that I must look for a corresponding 1 Ymix and 13 Ahau—recollecting that I need not expect to find them falling on any fixed date. But, as the order of the thirteen subdivisions is given, with the terminal Ahau numbers, it is not necessary to attempt so extended a research, and prudence dictates that I keep my experiments within the narrowest possible limits to guard against mistake. I will, therefore, at the start, proceed only to the end of the first twenty-year period, or katun, and look for 11 Ahau. The trial is made. It proves abortive, as I anticipated. The Ahau number at the end of twenty years is 7 instead of 11. The desired 11 Ahau is five months away to the left. It is the same old story of failure over again. But wait a minute! Five months are equivalent to one hundred days. To divide by twenty would take just five days from each of the twenty years of the katun. Years? What if they were not years at all that Landa was talking about, but only periods of three hundred and sixty days? They may be the ahaus. Let me hasten to find out how the numbers will run in a division of this possible katun into twenty such periods. Here it is—9, 5, 1, 10, 6, 2, 11, 7, 3, 12, 8, 4, 13, 9, 5, 1, 10, 6, 2, 11. Ah, this is significant! That paragraph of Percz—what are its exact words? “The Indians of Yucatan had yet another species of cycle, but as the method followed by them in using it cannot be found, nor any example by which an idea of its nature might be imagined, I shall only copy what is literally said of it in a manuscript, viz.: ‘There was another number which they called *ua katun*, and which served them as a key to find the katuns. According to the order of its march it falls on the days of the *uayeb yaab* and revolves to the end of certain years: katunes 13, 9, 5, 1, 10, 6, 2, 11, 7, 3, 12, 8, 4.’” Poor Don Pio! To have the pearl in his grasp and be unaware of its priceless nature—like so many others! But I must not exult too much yet. The succession of the katuns, reckoned according to this principle, is yet to be ascertained before my fancied discovery can be established by a crucial test. I score the ahaus off in the foregoing order, and, sure enough, the twentieths give the desired result: 11, 9, 7, 5, 3, 1, 12, 10, 8, 6, 4, 2, 13. Eureka! The perturbed spirit of the Maya calendar, which has endeavoured so long to impart its message to the world, may rest at last.

But, though confident I had discovered the secret of the ahau and katun count, when I tried the plan on the dates and reckonings of the inscriptions it proved totally inapplicable. There were periods into whose nature I had no insight; and if those I

surmised to be ahaus and katuns were really so, the former would not come in the right order, while the latter were excessive and numerated in a way quite unintelligible. It was discouraging, but I did not lose faith in my discovery. The inapplicability of the Yucatec scheme to the reckonings of the inscriptions, probably, was simply owing to different methods of computing the ahaus and katuns. There was no alternative but a patient and exhaustive analysis of the Archaic dates and time reckonings.

It would be tedious as useless to recount trials—failure outranking success a thousandfold—the results of which constitute the bulk of this book. I will only state, in brief, that I determined the character of the chuen and great cycle periods; that I discovered the first chuen was numerated 18, the first ahau, katun, day and day of the month, 20, and that the first cycle of the great cycle was numbered 13—the unit attaching to the second period in all instances; that I ascertained the cycle was composed of twenty katuns, numerated 20, 1, 2, 3, etc., up to 19, instead of according to the Yucatec order; that I finally deduced a chronological calendar whose perfect accord with the principal dates and reckonings throughout the inscriptions is proof of its correctness, and by reversing the process, succeeded in reconstructing the outlines of the entire Archaic chronological scheme. I expect my calendar to be challenged. It would be without precedent in the history of discovery if it were not. But I leave it to defend itself, conscious that it is as infallible as the multiplication table and knowing that all antagonists must finally go down before it.

The Archaic annual and chronological calendar schemes are susceptible of almost innumerable combinations and summaries, but for present purposes it is unnecessary to give here more than the simplest summarized forms:—

YEAR COUNT.		AHAU COUNT.	
6 days .....	Week.	20 days .....	Chuen.
20 „ .....	Month.	18 chuens .....	Ahau.
365 „ .....	Year.	20 ahaus .....	Katun.
4 years .....	Luster.	20 katuns .....	Cycle.
52 „ .....	Calendar.	13 cycles .....	Great Cycle.
7,200 calendars .....	Grand Era.	73 great cycles .....	Grand Era.

Some additional summaries will be given in explanation of different features of the calendars, and still others in the compendiums following the text; but I shall not attempt—as would indeed be futile—to exhaust the possibilities of the two schemes in this respect. The Mayas themselves evidently found the subject an unfailing field

for fresh discovery, and any one who has the time and inclination can follow in their footsteps with assurance that the field remains fertile as ever.

This is perhaps as appropriate a place as any to state one or two important things that do not come under any particular head.

In dealing with Maya chronology it must always be borne in mind that no allowance is to be made for bissextile days. They are dropped out entirely in both the year and ahau counts—as if we should skip the 29th of February, giving it no name or place in our almanac, though cognizant of its suppression and taking note of its existence in another way. Their years, therefore, though always appearing to consist of only 365 days, are the exact equivalents of ours, leap years and all, throughout whatsoever period the reckoning may extend. For all general purposes of comparison no change is required in either their or our style of computation ; but should we ever be fortunate enough to discover a point of correlation, we shall have to drop the name of one of our days every four years in order to keep the relative days of the two calendars in proper alignment, whether reckoning forward or backward.

Another consideration which must be constantly borne in mind is that all Maya dates relate to elapsed time. When a date is given it must be remembered that it is not the beginning of a period yet to run its course, but the beginning of one denoting a period already concluded. The ingenious numeration of their periods was designed to prevent confusion in this regard. The first day, chuen, ahau, katun, cycle and great cycle is not numerated 1, but 20, 18, 20, 20, 13, 73, as the case may be, denoting that the full round of the period has run and that this is the commencement of a new count. In other words, these beginning numerals are equivalent to nought or no count, the periods being designated only until after they had fully passed. It is very difficult to keep track of this style of numeration—so difficult, in fact, that familiar as I am with it, I am distrustful of having made some lapses in these pages.

## THE ANNUAL CALENDAR.



## THE DAY.

THE old Spanish writers say the Mayas divided the twenty-four hours into various shorter intervals, but the day appears to be the shortest period of time reckoning made use of in the inscriptions. There are signs for morning and evening, daylight and darkness and other lesser divisions, but they are used abstractly or as nature symbols, not as designating specific durations of time.

Twenty particular signs should identify the twenty days that constitute the basis of the calendar, but owing to variations—especially in the symbols for Ahau—a greater number of nearly distinct characters might readily be made out. Two things, however, are pretty constant about these signs: they are always surrounded by a border, giving them the appearance of cartouches, and they are nearly always placed on a support or pedestal, consisting of two scrolls coiling outward from the sides of an indented center-piece. These attributes serve to distinguish the days from other cartouche-like glyphs, and to determine if a particular sign means the day for which it is the character or something else—for almost without exception the symbols for the days have other significations. Signs for two of the days—Muluc and Men—do not appear in any of the inscriptions in my possession, while that for another—Ix—is too indistinct for its details to be made out. With these exceptions the typical Archaic forms are here given:—





Ik.



Akbal.



Kan.



Chicchan.



Cimi.



Manik.



Lamat.



Muluc.



Oc.



Chuen.



Eb.



Ben.



Ix.



Men.



Cib.



Caban.



Ezenab.



Cauac.



Ahau.



Ymix.



Ahau.



Ahau.



Ahau.



Ahau.



Ahau.

Some of the variations of Ahau are given above, but it would be idle to attempt to give them all, as they are almost as numerous as the occurrence of the sign. Anything appears to have served the purpose, since when there was an even count of chuens with no odd days it was unmistakable that the day referred to was Ahau.

When a day, meaning merely a period of twenty-four hours and not any particular day, is indicated, none of the above signs are used—at least without some distinct modification. For instance, what appears at first glance to be a slightly modified form of the Kan symbol, but which is really the sign for Cib inverted, is frequently made use of to denote a day or days, but in such cases it is never surrounded by a border and always has two opposed curves under it.



In initial dates the favorite sign for a day or days is the head with projecting teeth, square irid in the upper left-hand angle of the eye and accompanying wing—usually underneath. The *kin* or sun sign, with a wing at the side or bottom, is used for the same purpose both in initial dates and in the body of the inscriptions. But the day is most frequently indicated, without any separate sign at all, by a numeral to the left of the *chuen* symbol. This will be more readily understood when that feature of the calendar is explained.

The order of the days is the same as that given by Landa, but a different set serve as dominicals—Ik, Manik, Eb and Caban being the year bearers. I have constructed the annual calendar with Ik as the initial day, but I have grave doubts if Caban should not occupy that position.

To each day in the calendar a numeral is attached that gives it an identity which with the number of the day of the month it falls upon distinguishes it from every other day of the same name, not only in the year but in fifty-two years, or a round of the calendar. These numerals, however, count only to 13, so that it takes one full count and seven on the next to enumerate the days in their calendar capacity.

In the annual scheme the days are arranged in months. There are four different orders of days and thirteen of day numerals.

### THE MONTH.

There are eighteen months and what may be regarded as an irregular or fractional month; for, the eighteen regular months comprising but 360 days, there are five surplus days in the year. These five days are said to have belonged to no month, to have been called *xma kaba kin*, nameless days, or *uayeb-yab*, the couch of the year, and to have been regarded with superstitious awe because they were believed to be unfortunate. As quite two-thirds of the other days of the year were believed by the Mayas to be similarly unfortunate, and as these five days have names and numbers the same as the rest and are reckoned in the same manner in all computations of time, it appears to me that the mystery with which it has been endeavored to surround them is purely the offspring of ignorance. That they are the couch or end of the year and belong to none of the regular months, is true enough. But this division of the year has a sign to represent it, the same as each of the months, and takes its place with them in the annual and chronological calendars; therefore I do not see why it should not be regarded as of the same character notwithstanding its irregularity. I so consider it, and shall speak of it as Uayeb whenever I have occasion to mention it, as I would refer to Pop or any other month.

There are some variations in the signs representing particular months, but the ordinary type here given should enable the reader to identify them all:—



Pop.



Uo.



Zip.



Zotz.



Tzec.



Xul.



Yaxkin.



Mol.



Chen.



Yax.



Zac.



Ceh.



Mac.



Kankin.



Muan.



Pax.



Kayab.



Cumhu.



Uayeb.

The order of the months is the same as given by Landa, the year beginning with Pop. The days of the month are numerated: 20, 1, 2, 3, etc., up to 19.

## THE YEAR.

The solar year consists of 365 days, 5 hours, 48 minutes and 46 seconds. The Maya year takes cognizance of the 365 days only. The excess was known, however, we are assured by Landa, and an extra day made of it every four years; but these extra days never appear in the annual calendar nor enter into chronological reckonings.

Two important consequences result from the number and length of the months and the peculiar numeration of the days. The regular months comprising but 360 days, the five surplus days in a year serve to interrupt the continuity of the order of the days in the months and produce a different arrangement for the succeeding year. The effect of the day numbering is equally important. Thirteen is not an even divisor of 365, but leaves a remainder of one; hence, starting the year with any given day and making twenty-eight full counts of thirteen, an additional day will still be required to complete the year; so that every year begins with a day number greater by one than the year preceding it. This progression, supposing it to start at one, proceeds to thirteen, when it recedes to one again and starts anew. These series of thirteen years are said to have been regarded as weeks of years, but I cannot discover that any account is taken of them as time measures in the inscriptions. Four of them, or fifty-two years, complete the calendar. At the expiration of that time the count comes back to the starting-point. This results from the peculiar day numbering and arrangement of the months referred to. In consequence of the Uayeb period the twenty days rotate by stages of five, making a complete revolution every four years. Thus each day at different times takes four different positions in every regular month and one in Uayeb. For instance, if Ahau fall on the 3rd of the month in any given year, the succeeding year it will fall on the 18th, next on the 13th, then on the 8th, and so on in endless rotation. By the ingenious arrangement of the calendar every one of the twenty days with each of the thirteen numerals that give them their identity will occur once in the four positions of the regular months and in the one in Uayeb before the original position with the identical day number is again reached. Thus it will be seen that the length of the calendar is a matter of simple calculation:  $18 \times 4 = 72 + 1 = 73 \times 20 = 1460 \times 13 = 18,980$  days, or fifty-two years.

I have been thus explicit because the same law governs the chronological calendar, and we are thereby enabled to determine the time of the ahau, katun, cycle, and great cycle rounds and the length of the grand era itself.



### THE CALENDAR ROUND.

Fifty-two years complete the calendar round. At the expiration of that time the reckoning begins anew with the original date. Eighteen calendars mark a significant point of contact with the ahau count that appears to have been regarded as an important conjunction in Maya chronology.

I am satisfied that a year and day count runs collaterally with the ahau count throughout nearly all the inscriptions, but thus far I have been unable to satisfactorily determine the plan or plans—for I think that more than one style is made use of—upon which the reckoning is conducted. The number of possible combinations renders the range for conjecture very extensive, and it is only by an exhaustive trial that we can hope to discover the true method or methods employed by the Mayas. That they did not proceed directly by days, months, years, and calendars is manifest at a very first attempt to solve the problem. Then comes the question, How did they proceed? Was it by single days to 13, and thence by thirteens to 260? Was it by single days to 5, and thence by fives to 365? Was it by single days to 6, and thence to different multiples of that number? Was it by single days to 73, and thence by seventy-threes to 1460? Was it by lower stages of 1, 4, 13, 52, or 72 years? Was it by higher stages of 936, 1040, 1440, 18,720, 20,800, or 28,800 years? This is one of the excellent fields for discovery which Maya chronology offers to the student.

Further along, when I come to a consideration of particular inscriptions, I shall call attention to some facts which go far toward confirming certain theories I entertain respecting this point; but the instances are not numerous or conclusive enough in my estimation to justify a claim of absolute proof for them.



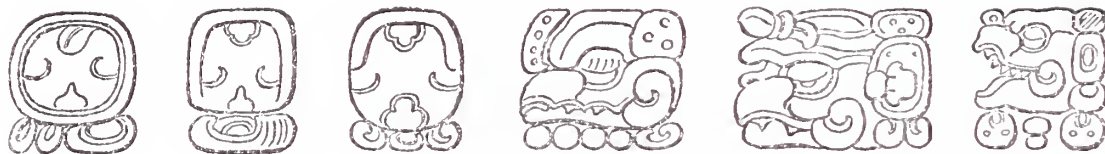
## THE CHRONOLOGICAL CALENDAR.

I now come to what has been a stumbling-block to every one who has hitherto attempted to deal with the Maya records. It has been known that the Mayas reckoned time by ahaus, katuns, cycles, and great cycles, but what was the precise length of any of these periods has been a debatable question. Some have contended, with the best of proof apparently, that the katun is a period of twenty years, while others have maintained, with proof equally good, that it is a period of twenty-four years. The truth is, it is neither.

The contention arose from a misapprehension, or total ignorance rather, of the Maya chronological scheme. It was taken for granted that a year of 365 days must necessarily enter into the reckoning; whereas, the moment the Mayas departed from specific dates and embarked upon an extended time reckoning, they left their annual calendar behind and made use of a separate chronological one.

The use of the term ahau-katun is avoided everywhere in these pages. Such a period never existed, except as a delusion of Don Pio Perez and his misguided followers. The error originated from a misconception of the Yucatec method of distinguishing the katuns. The ahau was numbered according to its position in the katun, as the eighth, tenth, or the sixth from the close; but the katun was designated by the particular number of the day Ahau with which it ended. Thus, for instance, it might sometimes be spoken of as the katun 10 Ahau; and at other times, by a mere reversal of the phrase, as the 10 Ahau katun. More frequently, however, the term katun was not used at all, its existence and number being implied by simple mention of the ahau date. But there was no ahau-katun.





### THE CHUEN.

I call this period "chuen" because it is commonly designated by the character Landa gives as the sign for that day. It is coequal with the month, embracing twenty days; but these days have no names or numbers, and the period has no specific place in the year. It is simply an abstract period. It occurs in nearly all the dates and time reckonings of the inscriptions, the order usually being: cycle, katun, ahau, chuen, day; but occasionally this order is reversed. In initial dates it occupies a place by itself, and is nearly always represented by the bird-animal head with serrate teeth and upturned convolution at the base of the jaws. In the body of the text it is usually designated by the chuen sign, with a curve and varying number of dots or smaller curves underneath. The number of chuens implied is ordinarily placed above the symbol, the numeral at the left side indicating the fractional number of days; but in a few instances, where the sculptor appears to have been crowded for space to properly inscribe the respective numbers, this order is reversed. Eighteen chuens constitute an ahau. They are numerated: 18, 1, 2, 3, etc., up to 17; the constituent days, 20, 1, 2, 3, etc., up to 19.



### THE AHAU.

This period is the real basis of the Maya chronological system. Everything proceeds by ahaus, till in succession the katuns, cycles, great cycles, and grand era are formed from them.

The ahau is a period of 360 days—the sum of the days in the eighteen regular months—and derives its name undoubtedly from the fact that it always begins with the day Ahau. It is the period, not between two Ahaus with the same numeral, but between the second two with a differentiation of four in their day numbering. Moving forward with this progression of four it results that the ahaus follow each other in the order of 9, 5, 1, 10, 6, 2, 11, 7, 3, 12, 8, 4, 13, 9, 5, 1, and so on—an order of succession that Perez quotes from an unnamed manuscript, but whose significance he failed to grasp.

Twenty ahaus constitute a katun. They are numerated: 20, 1, 2, 3, etc., up to 19.



### THE KATUN.

It is over this period that the battle royal has been fought. The question of twenty or twenty-four years has raged undeterminedly for more than half a century. As the facts themselves will show the folly of the whole contention, I pass it by without awarding to any individual combatant the discredit of his partisanship.

Twenty years of 365 days make 7,300 days. The katun does not reach that far, falling a hundred days short, as a multiplication of its constituent parts will show:  $360 \times 20 = 7,200$ .

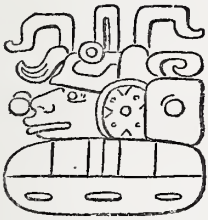
In consequence of the day Ahau beginning the ahaus it must also begin the katuns; and the ahaus succeeding each other by differences of four—as 9, 5, 1, 10, 6, 2, 11, 7, 3, 12, 8, 4, 13, 9, 5, 1, 10, 6, 2, 11, 7, etc.—it results that the order of the katuns, composed as they are of twenty ahaus, must be one in which each succeeding katun begins with a day number two less than its forerunner—thus: 11, 9, 7, 5, 3, 1, 12, 10, 8, 6, 4, 2, 13, 11, etc.

The katuns are numerated in the same manner as the ahaus: 20, 1, 2, 3, etc., up to 19.

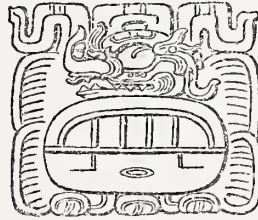


### THE CYCLE.

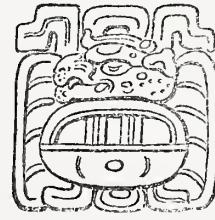
The cycle in the Archaic system consists of twenty katuns, or 144,000 days. Thirteen of them constitute a great cycle. They are numerated: 13, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.



53rd Great Cycle.



54th Great Cycle.



55th Great Cycle.

### THE GREAT CYCLE.

The great cycle is composed of thirteen cycles, or 1,872,000 days. As seventy-three great cycles constitute the grand era, and as that number is indivisible, the great cycles must have been numerated to conform to the numeration of the cycles—73, 1, 2, 3, 4, and so on in regular arithmetical progression up to 72.





### THE GRAND ERA.

The grand era is composed of seventy-three great cycles and comprises 374,400 years, or 136,656,000 days. It is the period in which the Maya chronological calendar completes itself, just as their annual calendar does in a period of fifty-two years.

As the existence of this period is very likely to be questioned, I will give my reasons more fully here for believing in such an era. The numbers 73 and 949 are as important factors in the Maya chronological scheme as 13 and 20. This results from two features of the system not hitherto touched upon, which may very properly be termed the minor and grand rounds of the periods. After 73 occurrences, and not until then, every period of the chronological calendar begins again with the same day of the same month, but (with the exception of the burner and great cycle) with a different day number. This is the minor round. Thirteen of these, or 949 occurrences, constitute the grand round, when the periods begin again not only with the same day of the same month but with the same day number. The following tables will show how harmoniously this principle runs throughout the whole scheme:—

	PERIOD.	DAYS.	PERIOD.	YEARS.
73×20 .....	Chuen.	1,460	Luster.	4
73×65 .....		4,745	Week of years.	13
73×260.....	Burner.	18,980	Calendar round.	52
73×360.....	Ahau.	26,280	Minor ahau round.	72
73×7,200 .....	Katun.	525,600	Minor katun round.	1,440
73×144,000 .....	Cycle.	10,512,000	Minor cycle round.	28,800
73×1,872,000 .....	Great cycle.	136,656,000	Grand era.	374,400

PERIODS.	DAYS.	YEARS.	CALENDARS.
949 chuens .....	18,980	52	1
949 burners .....	246,740	676	13
949 ahaus .....	341,640	936	18
949 katuns .....	6,832,800	18,720	360
949 cycles .....	136,656,000	374,400	7,200

It will be seen from the tables that the cycle and great cycle periods could round themselves out in harmony with the law governing all the rest of the scheme only at the expiration of the grand era. If the Mayas were consistent simply—if they did not capriciously spoil a plan which their preliminary work outlined to perfection—then the grand era must have been the crowning period of their scheme. It was the only period there could possibly be of which every element of both calendars would be an even divisor. Thus it comprised exactly :—

20 grand katun rounds.  
 73 great cycles.  
 260 minor katun rounds.  
 400 grand ahau rounds.  
 949 cycles.  
 1,460 13-katun periods.  
 5,200 minor ahau rounds.  
 7,200 calendar rounds.  
 18,980 katuns.  
 29,200 13-ahau periods.  
 93,600 lusters.  
 374,400 years.  
 379,600 ahaus.  
 525,600 burners.  
 6,832,800 months and chuens.  
 22,776,000 weeks.





## THE BURNER PERIOD AND BISSEXTILE COUNT.

THE theory I am about to advance is almost a purely hypothetical one. For its support I have little to offer beyond the firm hold it has taken on my own mind, the intelligible relative data of the inscriptions being wholly insufficient to conclusively establish it; yet I present it with entire confidence that future discovery will prove it to be substantially true. It is not a solid basis for an important superstructure, but necessity compels us at times to build, tentatively at least, on very uncertain foundations. In this instance the necessity of some scheme for keeping an account of the bissextiles renders it imperative to discover a simple and harmonious plan by which they can be computed; for, though unnoticed by both the year and the ahañ count, it is not for a moment to be supposed they were totally ignored. They must have been taken account of in some way, otherwise all Maya time reckoning was imperfect—which is an absurdity. It is impossible to incorporate them, singly or in aggregates of what number soever, with either the annual or the chronological calendar, without disturbing its regularity and thereby nullifying it at once; hence, there must be some method of taking cognizance of them apart from both calendars. What that method was, has been a perplexing question. I am going to offer what appears to me the most practical solution of it.

There being two methods of computing time, it is a logical inference that there are also two corresponding methods of computing the bissextiles. The total number of bissextiles in the grand period of 374,400 years, reckoned according to the Julian plan, is 93,600. That number of days makes exactly 13 katuns; hence, the bissextile count corresponding with the chronological calendar could be reckoned by ahañ and katuns, the same as the calendar itself. But when it is attempted to arrange a bissextile count in accord with the annual calendar, it will be discovered that the 93,600 bissextiles of the grand period do not fall evenly into years but leave some remaining days—the exact numbers being 256 years and 160 days. Here is one of the two instances throughout their whole range in which the Maya calendars fail to work harmoniously, the other being the indivisibility of 1460, the number of days in a four-year period, by any of the lesser periods of days. Had the total of bissextiles been evenly divisible into years, we should undoubtedly have found a period of 1460



years—equivalent to the Egyptian sothic period, when just a year of bissextiles accrued—prominent in Maya chronology; but nothing of the kind appears. The bissextiles would not divide evenly into years. This obstacle had to be surmounted in some way that would result in an even count. I think they overcame it by receding from a year count of bissextiles to correspond with the annual calendar and adopting a period of 260 days—exactly 360 of which periods would be comprised in the 93,600 bissextile total.

This 260 is another number about which ignorance in the disguise of knowledge has spun a web of mystery, as around the numbers 13 and 20. To believe all the assumed authorities, there must be seen in it the sacred *tonalamatl* of the Nahuas and the equally sacred ritual year of all the Maya tribes, an obscure relation to certain lunar reckonings, a far-fetched correspondence with the synodical revolutions of Venus, and other strange meanings growing out of its supposed composition from the mystic 20 and 13. I am aware of no reason why there may not as well be seen in it simply what it is, the day round or “burner” period; that is, it is the number of days that must elapse before the recurrence of the same day with the same numeral, and it is plainly indicated to be the burner period by three documents that have been handed down to us. No one but Perez, so far as I know, has called attention to it, in its character of burner period, as a factor of the Maya chronological scheme, and he confessed his ignorance of its nature and scope\*. It is not necessarily composed of 20

\* Dr. Brinton has allowed carelessness to betray him into a surprising error respecting this burner period. In an essay entitled “The Folk-Lore of Yucatan,” to support his contention that there still exist relics of an ancient form of fire-worship which once prevailed throughout the peninsula, he says: “That they [the rites] are not yet out of date is apparent from a copy of a native calendar for 1841-2 obtained by Mr. Stephens when in Yucatan. In it the days are marked as lucky or unlucky, and against certain ones such entries are made as ‘now the burner lights his fire,’ ‘the burner gives his fire scope,’ ‘the burner takes his fire,’ ‘the burner puts out his fire.’ This burner, *ah toc*, is the modern representative of the ancient priest of the fire.” If Dr. Brinton had observed closely the caption of the exhibit referred to he would have seen that it was not a modern native calendar for 1841-2, but, as its title explicitly states, “an almanac adjusted according to the chronological calculations of the ancient Indians of Yucatan for the year 1841 and 1842, by Don Juan Pio Perez;” and, if he had regarded the introductory remarks of Señor Perez, he would have seen furthermore that the gentleman endeavored to prove the reliability of certain features of his calendar, notwithstanding his inability to explain them, by the statement that they were the same found by him in “three ancient almanacs” which he had examined and found to agree very nearly. As to whom the burner is that takes his fire, kindles it, permits it to destroy and extinguishes it, Señor Perez confessed his total ignorance, as he had been unable to find any explanation of the mystery. That would scarcely be the case had *ah toc* been still wielding his firebrand, as Dr. Brinton asserts. That this burner had nothing to do with modern fire-worship is evident from the fact that the mention of it was taken from ancient authorities; and that it never had anything to do with fire-worship at all is probable from the further fact that in the most ancient of these authorities, the codices and inscriptions, we find this idea of fire—whether represented by a torch in the hand of a grotesque human figure or attached to the paws and tail of a panting dog, or simply by the head of the panting dog itself—inseparably associated with one of the elements of Maya chronology, the 260-day period.



multiplied by 13, but is arrived at by various ways—the 65 repeated four times and the 52 five times, of which so many examples are given in the codices, both undoubtedly leading up to it. The specific examples mentioned are as follows:—

[From the PEREZ ALMANAC.]

3 Chicchan—65—	3 Oc—65—	3 Men—65—	3 Ahau—65=	260
20	20	20	20	
10 Chicchan—65—10	Oc—65—10	Men—65—10	Ahau—65=	260
20	20	20	20	
4 Chicchan—65—	4 Oc—65—	4 Men—65—	4 Ahau—65=	260
20	20	20	20	
11 Chicchan—65—11	Oc—65—11	Men—65—11	Ahau—65=	260
5	5	5	5	
<u>65</u>	<u>65</u>	<u>65</u>	<u>65</u>	=260

[From the CODEX CORTESIANUS.]

9 Kan—65—	9 Muluc—65—	9 Ix—65—	9 Cauac—65=	260
14	14	14	14	
10 Kan—65—10	Muluc—65—10	Ix—65—10	Cauac—65=	260
20	20	20	20	
4 Kan—65—	4 Muluc—65—	4 Ix—65—	4 Cauac—65=	260
20	20	20	20	
11 Kan—65—11	Muluc—65—11	Ix—65—11	Cauac—65=	260
11	11	11	11	
<u>65</u>	<u>65</u>	<u>65</u>	<u>65</u>	=260

[From the MANUSCRIPT TROANO.]

5 Cauac—65—	5 Kan—65—	5 Muluc—65—	5 Ix—65=	260
20	20	20	20	
12 Cauac—65—12	Kan—65—12	Muluc—65—12	Ix—65=	260
20	20	20	20	
6 Cauac—65—	6 Kan—65—	6 Muluc—65—	6 Ix—65=	260
20	20	20	20	
13 Cauac—65—13	Kan—65—13	Muluc—65—13	Ix—65=	260
5	5	5	5	
<u>65</u>	<u>65</u>	<u>65</u>	<u>65</u>	=260

This 260-day period does not properly come under the head of either the chronological or annual calendar, and yet it pertains to both. It is the mediator between them, reconciling the year and ahau counts and bringing them into accord at stated intervals. I confess that the necessity for it, in this respect, is not apparent to me, since all the purposes it seems to serve could be as readily fulfilled by a direct use

of the year and ahau counts; but throughout the Maya calendar schemes there is exhibited a fondness approaching perversity for reckoning by period rounds and stages of seventy-three, and the introduction of the burner count gratified this propensity in both regards, the single burner constituting a day round and seventy-three of them a calendar round. Neither 360, the number of days in an ahau, nor 365, the number in a year, is divisible by 260. The first contact of the burner period with the ahaus comes at 4,680 days, the equivalent of 13 ahaus and of 18 burners, and the first contact with the years at 18,980 days, the equivalent of 52 years and of 73 burners; but not until 341,640 is a common multiple of 260, 360, and 365 reached. That is eighteen calendar rounds or 936 years, 949 ahaus or a complete ahau round, and 1314 burner periods. So it is probable that a 260-day count ran throughout all the Maya computations of time—not as a sacred year or a mysterious hieratic method of reckoning, but as a mediator between the conflicting calendars and a harmonizer of the bissextile counts.

But to arrive at its use in the bissextile scheme. The 93,600 bissextiles accruing in the grand period being resolvable into the ahau and katun reckoning, it is likely they were computed in accordance with that plan. To render them more readily comprehensible, I will present the exemplifications of my theory in tabular form:

CHRONOLOGICAL CALENDAR BISSEXTILE PLAN.

GREAT CYCLES.	CYCLES.	KATUNS.	AHAUS.	CHUENS.	BISSEXTILES.
				73	1
			73		18
		73			360=1 ahau.
	73				7,200=1 katun.
73					93,600=13 katuns.

There is but one inharmony in this plan—the 73 ahaus do not result in a chuen of bissextiles but in only 18. This, however, was one of their cardinal numbers, which multiplied by 20 made the desired 360, and it was in this fashion that they arrived at the ahau count in their chronological bissextile reckoning.

As already stated, an adjustment of the bissextiles in conformity with the principles of the annual calendar scheme cannot be made upon this plan; neither can it be made upon any plan leading up to a year of bissextiles, as the total number of bissextiles is

not evenly resolvable into years. It was to overcome this difficulty, I think, that the 260-day count of bissextiles was introduced, in the manner following :

ANNUAL CALENDAR BISSEXTILE PLAN.

CALENDAR ROUNDS.	CALENDAR ROUNDS.	CALENDAR ROUNDS.	CALENDAR ROUNDS.	4-YEARS.	BISSEXTILES.
				1	1
			1		13
		20			260
	360				4,680 = 260 × 18.
7,200					93,600 = 260 × 360.

Here again is a departure from the expected, the natural supposition being that they would pause at the 18-calendar round in consequence of its importance as the point of the chuen, ahau, and year conjunction ; but this would have resulted in a bissextile count of 234, an awkward number to deal with in their peculiar numerative system ; but that they did arrive at it, nevertheless, is shown by the frequent appearance of the eighteen 13-bissextile sign— $18 \times 13 = 234$  ; and that they at times adopted a chuen count of bissextiles also, is equally well indicated. This proves that they must interchangeably have made use of two other plans—as shown below :

VARIANT CHRONOLOGICAL BISSEXTILE PLAN.

GREAT CYCLES.	CYCLES.	KATUNS.	400 DAYS.	CHUENS.	BISSEXTILES.
				73	1
			73		20 = 1 chuen.
		73			360 = 1 ahau.
	73				7,200 = 1 katun.
73					93,600 = 13 katuns.

## VARIANT ANNUAL BISSEXTILE PLAN.

CALENDAR ROUNDS.	CALENDAR ROUNDS.	CALENDAR ROUNDS.	CALENDAR ROUNDS.	4-YEARS.	BISSEXTILES.
				$\frac{1}{=73 \text{ chuens.}}$	1
			$\frac{1}{=73 \text{ burners.}}$		13
		$\frac{18}{=73 \text{ 13-ahaus.}}$			234
	$\frac{360}{=73 \text{ 13-katuns.}}$				$4,680 = 260 \times 18.$
$\frac{7,200}{=73 \text{ great cycles.}}$					$93,600 = 260 \times 360.$

I have incorporated a chronological count in the last table in order to show what would be the regular sequence of the periods. It also shows that the thirteen ahau and katun reckoning was compatible with that of the annual calendar, and affords an explanation of why mention of a 13-katun count only is found in the Yucatec chronicles. It was probably the count in common use, being more readily alignable with the annual calendar than the count by cycles of twenty katuns.

The foregoing tables are all based on the accrument of a bissextile every four years, for the evidence, so far as it goes, points solely to that conclusion. Whether any allowance was made for the deficient minutes and seconds, I have been unable to determine; but as no notice appears to be taken of them throughout periods greater than that in which the aberration caused by them is corrected by the Gregorian plan, it might be assumed that the Mayas never attained to an accuracy beyond that of the Julian system. Still, they may have made the correction at longer intervals, or in a manner I have been unable to detect. I shall be gratified should future discovery prove them to have been as accurate in this respect as in nearly every other. The correction, however, could be made only by going outside their regular bissextile plans—as they had to go outside of the calendars to keep an account of the bissextiles themselves—a circumstance that will render its detection very difficult.

The little evidence I have to offer in support of my theory cannot, I am aware, have the weight with others that it has with me, being meagre and incoherent and the chief prop resting on an error in a glyph. Others will naturally distrust it, but I would be willing to stake a great deal on the correctness of my conclusion.

The glyph given at the head of this section, in one or another form there represented or with some minor modification, is one of frequent occurrence in the inscriptions, always following a date or time reckoning, but without appearing to be ever a



constituent part of either, unless at Palenque, or to be employed as a directive sign. It is the head of the panting dog, the protruding tongue being its distinguishing characteristic. It looks more like a tiger's head here, but, tracing it to the codices, it is found to be substantially identical with that of the torch-bearing dog that figures in illustrations of the 260-day or burner period. At the important date found so often in the inscriptions of Copan and Quirigua, 4 Ahau-13 Yax, the beginning of the 15th katun of the 9th cycle—which I believe to have been also the beginning not only of a 13-katun but of the katun round or a 949-katun period, and which was for a certainty the beginning point of every period figured elsewhere in the inscriptions except the cyclic ones—three different periods, designated by three distinct forms of this glyph that I claim marks the bissextile count, are denoted to have begun. I believe them to be the 234, the 260, and the 360-day bissextile periods—300, 270, and 195 of them, respectively, having elapsed from the beginning of the grand era up to that date. About the 234 period— $13 \times 18$ —there can be no question, and I think the numerative characters designating the other numbers admit of very little doubt. One of them, as nearly as can be made out from the disfigured cast, is identical with a character that in two other places denotes a 260 count; the other is a composite form of  $18 \times 20$  and occurs in several instances where it is pretty certain that it stands for 360. The most notable peculiarity about all these three forms of the glyph, however, is that nowhere in the inscriptions within a range of more than nine hundred years are they to be found except in association with the date in question. This is suggestive, because other forms of this assumed bissextile sign occur frequently. It indicates that they mark periods of long duration.

Now, if my notion that they denote respectively the accrument of 234, 260, and 360 bissextiles be correct, then it is at distances corresponding with such results that other like signs must be sought. During the little time I could devote to the examination, I have found nothing that met my expectation in looking backward, and, looking forward, nothing till Stela F at Quirigua was reached. On that is a reckoning leaping ahead until the beginning of a katun in the 13th or beginning cycle of the succeeding great cycle is indicated, with an  $18 \times 20$ , or 360, bissextile sign immediately following it. The date—very mutilated, but so far as can be made out—is 1 Ahau-13 Yaxkin. Turning to the indicated cycle, it is discovered that no katun in it begins with that date, but the eighth katun begins with 1 Ahau-13 Yax. Now, from 4 Ahau-13 Yax, the beginning of the 15th katun of the 9th cycle in the preceding great cycle, the 3 cycles and 13 katuns, or 1440 years, necessary to constitute an ahau of bissextiles, reach precisely to this date. I am satisfied that 1 Ahau-13 Yax was the date intended, if not actually carved—for the difference between the symbols for Yax and Yaxkin is so slight that it requires but little defacement of a glyph to render them indistinguishable—and that the burner sign in question indicates that 360 or an ahau

of bissextiles accrued at that point of the calendar as they did at the beginning of the 15th katun in the 9th cycle of the preceding great cycle.

The frequent use of this burner glyph, in varied forms, in the Palenque inscriptions would appear to show that it there serves a purpose apart from the mere recording of the bissextiles, viz.: that it helps to mark, wholly or in part, the length of the periods by indicating the number of bissextiles that have passed. If this be so, it must be used in its 13 capacity, or multiples thereof, resulting from a complete round or rounds of the annual calendar. It requires much labour to settle any of these questions definitely, and I have not yet found time to work this particular one out. But, in directing the notice of students to it, I would call their attention to another fact, namely: the Palenque bissextiles and minor periods appear to be reckoned from a different starting-point from those of Copan and Quirigua. That is, while the grand cycles, cycles, katuns, and ahaus run the same, apparently, the important date 4 Ahau-13 Yax is never once noticed, but in its stead another date, 8 Oc-3 Kayab, comes into significant prominence. All four of the principal Palenque inscriptions lead up to and end with that date—not in the same position in the calendar, but in different positions, as though wherever it occurred it was of signal importance. Can it be that, for some reason and by some process not readily perceptible, they had adopted that date as the initial point of bissextile and minor period reckoning? No better explanation of its undue prominence suggests itself to me; but I must leave the determination of the question to others, or until I have time to get about it myself.

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## NUMERATION AND SIGNS FOR NUMBERS.



THE key to the inscriptions is a knowledge of the Maya numerals. What advance I have made has been attained by purely mathematical processes, and it is solely by the same means that the ultimate solution must be achieved. There can be no certainty of the correctness of an interpretation, in most cases, until the character and value of a glyph are mathematically demonstrable. This requirement would render the full clearing up of the mystery a hopeless undertaking were it not that so great a proportion of the characters are qualified by numerals or are numerals themselves that to arrive at their significance is only a question of patient effort, and that a knowledge of them will probably reveal the meaning of the few remaining glyphs that have no apparent numeric values or affixes. Hence, the identification of the numerals and the discovery of the methods of using them are the most important steps toward further advancement in the study.

The greatest difficulty in following Maya computations is the absence of signs showing the particular process employed. It may be that addition, subtraction, multiplication, and division are all indicated in some way, either by signs or by the relative positions of the factors; but, if so, I have detected but two signs that by any possibility imply the process to be used, and these occur so seldom and irregularly that I do not feel entire confidence in their supposed significance. I shall speak of them more fully in connection with the day series of numerals. Generally, however, the numerals are set down so at random that it is a difficult exercise to ascertain what is to be done with them—the more puzzling as the problem is frequently a complex one, involving two or more distinct processes or the employment of the same one several times over. There seem to have been no sure rules in Maya mathematics. While they added, it was usually only till they arrived at some convenient number for multiplying; while they multiplied, it was commonly by only a few favorite numbers; and while they divided and subtracted, it was only in such an occasional way as to render these features of their mathematic system of very little account. They appear to have made no use of fractions, but arrived at fractional results in intricate computations by the employment of varied integers whose aggregate produced the same effect.



In regard to the different series and single characters which I believe to be numerals, I will state that they are not all to be found on the tablets of any one city. While the majority of them and of the other glyphs are common to all the inscriptions, certain of them are to be found only in a particular place. For instance, signs are used at Palenque that are not discoverable at Copan, and at Copan that are not to be found at Quirigua, and at Quirigua that do not occur in either of the former cities. Thus it appears probable that, while the same general system prevailed throughout all of these localities, there were differences amounting at least to provincialisms if not to dialects.

Again, the signs in question are not used indiscriminately with every kind of period, but particular ones are applied to particular classes of counts, some appearing to be applicable to but a single sort of period, while others qualify several of different character. While this is true in a general way of the beginning signs, I think it will be found to be more especially true in respect to the numerals themselves.

The list of number signs and of characters ordinarily employed in a numeric sense will be found astonishingly large, in my judgment. My reasons for thinking so are not alone the serial appearance of a multitude of signs and the manner in which they are used, but include the still stronger one of the determinative feature that characterized Maya and Mexican numeration. An object was seldom mentioned without a suffixed particle indicating the quality or class of the thing enumerated. Dr. Brinton states that Beltran de Santa Rosa gives not less than seventy-two of these determinative particles, and does not exhaust the list at that. I have at hand no satisfactory Maya example of what I desire to explain, and so will make use of a Mexican one given by Bancroft. *Polhualli* meant twenty, or a score, and was used without any determinative particle for simple numeration; *polhualli-pilli*, for thin objects packed one above another, as tortillas and sheets of paper; *polhualli-quimilli*, for articles in large rolls, as cloth; *polhualli-tecpantli*, for things ranged in order, as persons, lines, walls; *polhualli-tetl*, for round or plump articles, as seeds, eggs, fruit, birds; and so on to perhaps as many classes as given by Beltran. Now, I believe that these distinctions—or many of them, at least—which in speech and in writing with our characters were made by means of determinative particles, were shown in the native graphic system by the use of different sets of glyphs for numerals. Thus, I think that certain sets were used for the periods of the chronological calendar, others for the year and day counts, and still others for various other kinds of reckoning. What at once induces and justifies this opinion is the persistency with which certain evidently qualifying characters adhere to certain classes of glyphs, some of which characters, when found in other connections where their value can be ascertained, are discovered to be numerals. For instance, of the bouquet-like series the simplest form when accompanying Ahau in a date means that it is the beginning of an ahau, while other forms of it represent 6, 10, 72, 73 and 7,200; from which I consider it reasonable to infer



that the rest of the series are numerals also. Of the double-character series, or what have been termed the *ben-ik* signs, three occur in positions where their numerative value is demonstrable; hence there can be little doubt that the entire series are numerals. The same may be said of the hand series, and half a dozen others. In my opinion, therefore, nearly all the minor characters in the inscriptions and many of the larger ones will eventually be demonstrated to be signs for numbers.

The number and diversity of these signs and the fantastic character of some of them—notably the face series—suggest a hieratic design to conceal the purport of the inscriptions from the uninitiated; but I think the determinative feature of their numeration, the desire to give symmetry and grace to their glyphs, and the possible purpose to avoid sameness and repetition, sufficiently account for the variety without ascribing it to a cryptogramic intention. It is probable, therefore, that all the other series of numerals were as intelligible to the populace as the simple one of dots and bars—being, as it were, a mere difference in the style of characters, such as is to be seen in fancy printing or ornamental sign-writing.

While it is likely that in most instances there is a full series of similar signs, just enough modified to distinguish them from each other, running from 1 to 20, I do not think this to be the case throughout. It will be found, I believe, that there are many sporadic signs, or signs without any serial connection. The frequent use of certain numbers accounts for this, and it is to designate these that solitary symbols are oftenest employed. There will probably be more signs discovered for 13, 18, and 20, than for any other number.

I do not claim that the value of any sign about to be given is correct beyond question. On the contrary, I think it very likely that in some instances I shall myself find reason for a change. But, as in most cases I shall explain why I have attached the value given to particular signs, the reader will not be misled, but can accept, reject, or modify my estimate, according to his own judgment. It will be only by persistent trial, assumption, alteration, and readjustment, until a figure that fulfils the requirement of every condition under which a character appears is hit upon, that we shall be able to fix the values of all the numeral signs.

Before giving the lists of specific numerals I deem it advisable to speak of some general principles that appear to underlie Maya notation.

A sign for 2 generally indicates that the value of the character or characters qualified by it is to be doubled. Of such signs the pendent opposed right angles or an indented ball with two small dots in it is usually found with ear designs and other ornamental numerals; but the most common sign for doubling is a line or circle of dots, either of which increases the value of the numeric symbol so qualified twofold.



The cross, in its various forms, appears to have been dedicated to the number three and multiples thereof. The St. Andrew's cross denotes 3, while the crossing of other numeric signs in a similar manner signifies that the number they singly betoken is to

be multiplied by three—as, for instance, two hatchets crossed **X**-wise represent 18. The Egyptian cross, or *ik* symbol, is a sign for 6, while a square cross with a small circle in the center—somewhat after the Greek or Maltese model—stands for 18.






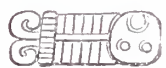
The double right angle, either simply joined in a **U**-shaped character or interlocked as in the symbol for the month Pop, is indicative of four and its multiples. The latter form, found chiefly upon the idols, is often raised to several times its simple power by additional links, each pair denoting 4; so that 8, 12, 16, 20, or 24 may be expressed by glyphs that at a superficial glance might appear identical. The number of sets of angles is generally indicated by dots placed at their outer corners.

The knot—probably significant of the tying up of the single hand count—runs with five and its multiples. I am in doubt yet if the single, double, triple, and quadruple knots represent respectively 5, 10, 15, and 20, or whether all of them alike stand for 5, though I am inclined to the former surmise. The knot is a rather difficult figure to draw rapidly, and I think cursive forms of it are detectable in other quite different characters, especially the banded ones with lateral loops that seem to serve merely as pedestals to the superimposed glyphs.

The *cimi* sign, or bar between two dots (in which Dr. Brinton beholds the image of a maggot), the skeleton jawbone, and the irregular mouth line and grinning teeth of a skull—all alike suggestive of a death's-head—are three signs for 10 which, either singly or combined, form part of a majority of the face signs for numbers higher than that. The last of these more particularly belongs to the codices, but in the inscriptions the grinning teeth are often recognizable when neither the jawbone nor the *cimi* sign can be distinguished.

Dividing a numeral into thread-like lines increases its value a hundredfold, and there is reason for believing that partial striation raises it tenfold. If it were certain that the purpose was to skeletonize the sign, as the effect suggests, then it would be only a fair inference to assume that all symbols indicating death pertained to decimal reckoning. As this is a very interesting and important point, I am disposed to illustrate it at some length. The cursive form of the sign for 72 in the ahau symbol—where the proposition is:  $5 \times 72 = 360$ —is this, , as nearly as the different shapes can be averaged. In the cycle symbol—where the proposition is:  $20 \times 7,200 = 144,000$ —the character representing the higher number is this, .

As the outlines and proportions of this character for 7,200 are indistinguishable from those of the sign for 72, the conclusion is unavoidable that the striation or skeletonizing augments the value a hundredfold. In the series whose shape suggests they were intended to represent bouquets or bundles of feathers there is evidence of double striation. There is a great variety of these characters, each distinct form probably representing a different number, though I have been able to determine the value of

but few of them. When this one, , is attached to Ahau in a date it means that the day begins an ahau, thus having the sense of beginning, as is the case with one of the characters in other numeral series. Great latitude was exercised in the drawing of this particular sign, but that is to be expected of all characters whose position renders their meaning unmistakable. Another form, , is part of the symbol for the month Zac, in which connection it is betokened to be an equivalent of 6. In the symbol of the month Kayab in the inscriptions this form  is substituted in place of a sign for 10 in the same symbol as it appears in the codices, thereby justifying the presumption that it stands for that number. It will be noticed that in none of the signs for simple numbers is the character striated. In ahau symbols in Tikal this form  represents 72. It is a partially skeletonized member of the same series, with a sign for 2 at its base. The question is, is the upper part a sign for 7 raised to ten times its value by partial striation? That the peculiar form is not accidental or meaningless is proved by the fact that on the Tablet of Inscriptions at Palenque a variant of it, , represents 73 in the calendar-round symbol. The only difference is the replacement of the 2 by a 3 sign at the base, the partially skeletonized superstructure still signifying 70. Again, and in the same tablet, the 7,200 feature of the cycle symbol is represented by the former of these signs still further skeletonized, thus: . Here the hundredfold value imparted by complete striation is unquestionable; the only doubt is as to whether a tenfold increase is implied by partial skeletonizing.



## THE FACE NUMERALS.

THE group I call the "face" numerals is the most interesting of all the series, not merely on account of its singular character, but because it affords so much insight into the meaning of the personages represented on the monuments and in the codices. I have not determined the characters beyond 20, and of that list three are uncertain, but it is likely that faces indicating higher numbers will be discovered. These numerals are chiefly employed in initial dates, a circumstance that renders their value easily ascertainable, but they are also at times made use of in the body of the text. The fact that a face which is readily recognizable as one of this series sometimes constitutes a glyph by itself lends probability to the supposition that other lone faces, not recognizable, represent numbers greater than 20. There is considerable variation in some of these characters, as is to be expected of figures made in different places and eras; but, taking all things into consideration, the types will be found to be remarkably constant throughout. The most noticeable difference is in the head-dress, or whatever the upper part of the glyph may be termed; but this is a peculiarity in the representation of all the personifications of the codices and inscriptions. Different head-gear was given to every one of them at times. Whether this was mere caprice, or whether it signified particular manifestations of power—as the various attributes of heathen deities were implied by different appellations—is a question yet to be determined. This face series of numerals, taken in connection with the examples already given, establishes two things pretty conclusively: first, that there was a principle, or system, underlying the Maya scheme of numerical signs; and, second, that the principle was a mathematical one, by which the signs for the higher numbers were built from those below, just as the greater time symbols were constructed from the less. The only process employed in the face series, so far as can be seen at present, is that of addition; but it is not unlikely that when higher numerals of this class are identified, multiplication also will be found to enter into their composition, as it does into the signs for higher numbers already instanced.



## FACE SIGN FOR 1.



Attention is directed to four characteristics of this sign. First in importance, the lock of hair that descends in front of the ear and, curving to the left, extends toward the chin. Second, the peculiar character of the ornament that adorns the ear and projects over the cheek. Third, the forehead ornament—not clearly distinguishable, but never a single piece. Fourth—but occurring only in the last glyph, which is from a Quirigua monument—the curve surrounded by a border of loops at the back upper part of the head. These are all survivals of the original types, which are to be found in the codices—the picture of a woman and one of its abbreviations. The Quirigua glyph has added the characteristic of the abbreviation to those of the woman's head itself. It will be seen that the limitations of glyphs in crowded inscriptions necessitated the carrying of the characteristic lock of hair forward to the chin instead of letting it depend to the waist, as in the full figure of the woman; but in the images representing 1 on the monuments the lock projects directly from under the chin, having the appearance of a flowing beard, as in the idol of the great stela at Quirigua, and the left-hand one of the four kneeling figures in the tablet of the Temple of the Sun at Palenque. There are two other faces which I believe to represent 1, the chin-lock betokening the character of the former and the forehead sign and pendent ornaments that of the latter. Both faces—one being the central object of worship in the Temple of the Sun tablet and the other the breast ornament or distinguishing emblem of the figure in the large Tikal inscription—are surrounded by signs denoting beginning, a circumstance nearly always occurring with this number in its association with godhead, evidently indicating that the deity it represented was recognized to be the first or leading god of their pantheon.



## FACE SIGN FOR 2.



This glyph is not encountered in any place where its value can be determined for a certainty; but, for the reason that will be explained when I come to the number 12, I believe there can be but little if any doubt that the above face is a sign for 2.

## FACE SIGN FOR 3.



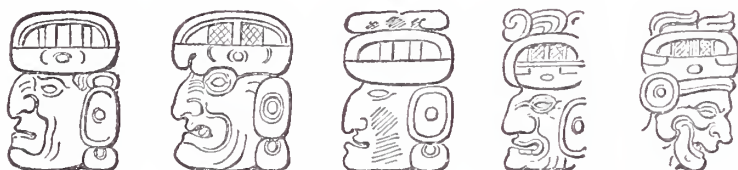
There is considerable variation in these signs, but every one of them occurs in a position that renders its value unmistakable. The first three are from Palenque, but the fact that the last of the trio is from an inscription several thousand years later than the others, and that the fourth glyph is from Quirigua, may in some measure account for the difference. The band on the forehead appears to be the only constant characteristic. The ear mark, on the two faces where it is visible, suggests a half *ik* sign. The dotted ball on the forehead of the first two faces is also a distinguishing feature. All three of these peculiarities will be seen again when we come to 13, one of the signs for that number being the 3 and 10 faces combined.

## FACE SIGN FOR 4.



The distinguishing traits in this sign are the ball enclosed in a circle at the top of the head and the angular irid in the upper left-hand corner of the eye. I should include the tusk or tongue protruding from the back of the mouth—which forcibly suggests the interlocked 4-sign—but that it appears in the 6-face as well. The forehead and ear ornaments are not constant, and it is difficult to determine what any of them was intended to represent.

## FACE SIGN FOR 5.



This sign is the most readily recognizable of any in the series. It always bears conspicuously on top the bold character that constitutes the principal feature in the ahau, katun, and great cycle symbols—a conventionalized form of the closed hand, no doubt. It is substantially the same head as that of one of the grotesque personages of the codices whose symbols invariably represent 5.

## FACE SIGN FOR 6.



The chief characteristic of this face is the hatchet-eye. It appears to have occurred to some imaginative artist that the rigid sign for Ik—the day representing 6 in the series of day numerals—could be made more graceful and yet remain quite as intelligible; so the Egyptian cross and hatchet came to have the same significance. The latter is used invariably in the face signs for 6 and 16, while the former occurs frequently in the eye of personified time periods. The forehead ornament—two or more concentric half-circles—is another characteristic of the 6-face, and it is found also in one form of the numeral eye.

## FACE SIGN FOR 7.



The characters (for I believe there will be found to be two nearly distinct faces) for this number occur in no position in the inscriptions where as yet I am able to definitely establish their value, but I think it is safely deducible from other circumstances. Akbal is the day representing 7, therefore the face with that sign is intelligible enough; but the one with the circle around the eye is not so comprehensible—though the trace of a similar circle can be detected on one of the faces with the *akbal* sign. The circled face occurs, however, on Stela E, at Copan, in a connection that shows it must stand for 2, 7, 12, or 17. As a survey of the complete list of face numerals will prove it to be unlikely that it is 17, 12, or 2, there remains only the conclusion that it must be 7.



## FACE SIGN FOR 8.



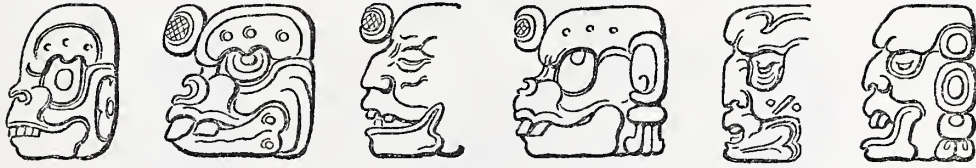
The lobed ear ornament projecting on the cheek appears to be the only constant characteristic of this face; but it will be seen later on that the forehead ornament of the first two faces is also a distinguishing feature of the face numeral for 8.

## FACE SIGN FOR 9.



The variation in these faces is so great that it can only be accounted for on the theory that the sculptors assumed that everybody must know what the current cycle was, and therefore carved the sign with the greatest freedom in initial dates. This surmise is rendered probable by the fact that when they came to inscribe it in the body of the text they exercised more care, its numerous representations there being very uniform. Its characteristics in this position are the peculiar forehead ornament and the thick protruding lips shown in the first of the above signs, the latter giving the face an expression of uncommon stolidity and solemnity. A circle of dots and a line with a curve in the middle appear frequently on the cheek of this face; but as neither is constant, and as both are sometimes found on other faces, I doubt if they are to be considered as distinguishing traits.

## FACE SIGN FOR 10.



The face symbol for this number is always a death's-head, or a face implying death by one or more of its features. In addition, it frequently has upon its cheek a bar between two dots, which in the codices is a variant of the character for the day Cimi, and which indicates 10, wherever found. The marked characteristics that distinguish the face throughout are the skeleton jaw and teeth. All the rest is variable, ranging from a grinning skull to a face whose upper part is quite life-like. I am particular in describing this character, for it will be seen that most of the face signs for the numbers from this point to 20 are simply combinations of the signs for lower numbers with that for 10. Maya numeration in its first stages was singularly like our own—proceeding by distinct designations to ten, followed by two names of uncertain derivation, and thence to twenty by addition of the lower numbers to ten.

Hun .....	one	Buluc .....	eleven
Ca .....	two	Lahca .....	twelve
Ox .....	three	Oxlahun .....	thirteen
Can .....	four	Canlahun .....	fourteen
Ho .....	five	Holhun .....	fifteen
Uac .....	six	Uaclahun .....	sixteen
Uuc .....	seven	Uuclahun .....	seventeen
Uaxac .....	eight	Uaxaclahun .....	eighteen
Bolon .....	nine	Bolonlahun .....	nineteen
Lahun .....	ten	Hunkal .....	twenty

The succeeding faces, with a few exceptions, will show that they anticipated us as closely in their style of notation as in that of nomenclature.

## FACE SIGN FOR 11.



This is one of the numbers whose symbol I have not been able to accurately determine; but I think the above face will be found to represent it. My reasons for this are based on its use in the codices. The characteristic trait is the curve with an irregular pendant behind the eye. This is the corkscrew curl, a sign for 1, which, added to the 10 indicated by the semicircle surrounded by dots, gives to the face its distinctive value of 11.

## FACE SIGN FOR 12.



There are apparently three distinct characters for this number. The first three faces seem to be radicals, while the others are formed by superfixing the sign for 2 to the death-face, or 10.

## FACE SIGN FOR 13.



Here also there are two or more distinct types. The radical with the *kin* symbol—one of the signs for 13—is the form commonly employed. The fourth glyph, in which the 3 and 10 faces are combined, occurs in the initial series of the Temple of the Cross. I do not know what to conclude about the last face in the list, which is the day numeral in the initial date of the Temple of the Sun, Palenque. It is more like the *chuen* sign than any other, but the number is unmistakably 13. It is more reasonable to suppose that the sculptor made a mistake in the *kin* sign than that the *chuen* symbol should have been used to represent both 13 and 15.

## FACE SIGN FOR 14.



This sign occurs but once where its value can be positively determined—on a Quirigua stela, the photograph of which is very indistinct. The glyph, however, is manifestly a combination of the face signs for 4 and 10.



## FACE SIGN FOR 15.



The first of these faces appears twice in the initial date of the Palenque steps—the only place where it occurs. As the face seems to be a death one, and therefore supposably intended to represent 10, the knotted head-dress must mean only 5, instead of the triple knot indicating 15. Yet, after all, this may not be the case, as the face is identical with that bearing the ahau sign, in a Tikal inscription, where the combination signifies but 5. It may be, therefore, that this particular face has no value in itself, but is merely a vehicle to bring the accompanying sign into the face series; in which event, in this instance, 15 would be indicated by the triple character of the knot. The second glyph is from Chichén Itzá, where it occurs many times, but in no relation where its value can be determined. It is, however, so manifestly a sign for 15 that I have not hesitated to place it here.

## FACE SIGN FOR 16.



All the signs for this number are a combination of the 6 and 10 faces. In some cases the declarative 10-sign—the bar between two dots—appears on the cheek, in addition; but the symbol occurs more frequently without it.

## FACE SIGN FOR 17.



The first of the above faces is from an initial date on a Quirigua stela, where there can be no doubt of its value; but unfortunately the photograph is too indistinct to be quite certain if the *akbal* symbol appears at the top of the head or not. I think it does, however, as the lower part of the glyph is unquestionably the death-face. The other form is common in the Palenque texts, but it occurs in no position where its value can be demonstrated beyond question.

## FACE SIGN FOR 18.



The forehead ornament of the face sign for 8 and the skeleton jaw of that for 10 are constant characteristics of this symbol, but it has likewise a broad curve behind the eye—readily distinguishable, however, from the corkscrew curl of 11. I think this is a conventionalized form of the dotted crescent sign for 18, as the dots are still perceptible within the curve on the second glyph, which occurs in the initial date of the Temple of the Cross, at Palenque.

## FACE SIGN FOR 19.



The 10 death-face and the 9 forehead ornament are the characteristics of this face. The lines and dots on the cheek—as already stated, in speaking of the 9 symbol—are used too promiscuously to be relied on as distinguishing traits.

## FACE SIGN FOR 20.



The hand on the cheek, the thumb or wrist forming the lower jaw, usually characterizes the face sign for 20. Generally the face is a death's head, identical with the symbol for 10, the outstretched hand evidently implying another 10 that is to be added to it. I judge that the number 20 is arrived at by addition instead of multiplication, not only from the sign for addition upon the hand and the fact that the preceding compounds have all been formed in that way, but from the character of the last face in the list, where the death's head is surmounted by another distinct sign for 10. Though the face symbol for the cycle is also a sign for 20—as its substitution for the 20-day character proves—I have not included it in the above list; for, notwithstanding that to a casual observer it might appear identical with the ordinary 20-sign, it has certain peculiarities that separate it and appear to restrict its use solely to that of a cycle symbol.

## NUMERAL VALUE OF THE DAY SYMBOLS.

THE likeness of certain numerative characters to some of the day symbols led me to believe that all the day signs were composed of parts representing numbers and that each day symbol had a specific numerical value. Further study of the subject has confirmed that belief. I have not succeeded in discovering the value of the constituent parts of all the signs; but so many of them are in accord with the ascertained value of the same characters in other connections that their occurrence in the day symbols is placed beyond the pale of accident, and the numerative quality of the day signs themselves is thereby raised from a mere conjecture to an established fact.

The first resemblance that attracted my attention was that between the sign, or signs, for Cimi and those which in so many instances demonstrably stand for 10. Next, the character for Ik, in its use apart from a day symbol, appeared to me to have a numeric significance, the exact value of which always centered upon 6. Now, starting with Caban, Ik would be the sixth day and Cimi the tenth. This coincidence was too remarkable to be passed by without further investigation, and so I arranged the day signs in order, beginning with Caban, and sought to ascertain if there were any recognizable features in the others.

Several interesting things became apparent directly in this survey of the characters in the light of possible numerals. The first was that the name of the third day, Cauac, evidently implied half of six—*ca*, two; *uac*, six. That three should be half of six was not the astonishing part of it, for it did not require a Maya revelation to tell me that, but the fact that a certain number of days should be halved was pretty strong evidence that they constituted a period of some kind. If, beginning with Caban, Cauac was mid-week, then Ik must be the end of the week. This was contrary to the teaching of all the assumed authorities, for, without exception, they assert that the Maya week was a period of five days, running from dominical to dominical. But I had learned not to revere these authorities overmuch, and so I proceeded to ascertain to what conclusions a week of six days would lead. It was apparent from the start that the sixth, or extra day, would break the monotony of the count from dominical to dominical—just as the year count is varied by an excess of five in the order of the days and of one in their numeration—so that it would require twenty counts to make a complete round of weeks, that is, before the week would begin again with the same day; hence, 120 days, or the week-round, should be a notable period in their reckonings—a conjecture I subsequently found to be true. It is just one-third of an ahau, and therefore falls readily in with that style of reckoning, but it does not accord with the



year count until the magic 73 is reached— $120 \times 73 = 8,760$  days, or 24 years—a circumstance which leaves no doubt in my mind that twenty-four years constituted a notable period also in their chronology.

The fact that Ik is the end of the initial week, and therefore likely to have had a terminal character ascribed to it, suggested that its symbol might be intended to represent one stone laid crosswise on another, a device by which the Mayas are said to have marked the completion of a katun; but a study of the symbol as it appears in the codices led me to a quite different conclusion. I became satisfied that the Ik sign of the inscriptions was nothing but a cursive form of the older character of the codices.

I desire to say a word here as to the comparative trustworthiness of the inscriptions and the codices in respect to the radical form of the glyphs. While the particular copies of the codices that have been preserved are probably of a later date than any of the inscriptions, I believe that their glyphs are of a more primitive character—that is, that they are copies of formulas which have come down from time immemorial, the ancient style of writing being adhered to in them with a scrupulousness not observed in the inscriptions. This is evident from the numerous instances of glyphs whose original design is plainly discernible in the codices, while in the inscriptions it is almost unintelligible or entirely lost. Therefore, I regard the codices as the better authority in respect to the primitive character of the glyphs.

In the codices, it will be seen, the symbols for Ik and Kan are substantially the same, the only real difference being that in Kan there is a divided inclosure at the top and that the bent bar is dropped down so that the two pendants touch the bottom of the glyph. The bent bar at once suggests the double right-angle sign for 4, and the pendants are identical with those attached to the numeric eye, where each has the value of 1. Now, if this surmise is correct, as I believe it to be, in Ik the numbers must be simply added— $4 + 2 = 6$ ; while in Kan they must be multiplied— $4 \times 2 = 8$ . Assuming this to be the true explanation of the bent bar and pendants, it follows that the divided inclosure at the top of Kan must be simply a sign for multiplication. If it be so, the sign should hold good in other places. Let us see if it does. Two other day symbols have this same divided inclosure—those for Ix and Chuen. The former, in addition, has three small circles that have the value of 3 each (as we discover from their use in the numeric eye and ear); but the value is doubled here by the surrounding dots, so that each circle represents 6; hence, in one sense, the sign holds good here, as  $6 \times 3 = 18$ , the numerative value of this particular day—though the same result might be reached by addition, while a serial multiplication of the factors would produce 216. Chuen has the divided inclosure and three curves (which, singly, stand for 5), although the lower one—to give symmetry to the glyph, undoubtedly—is usually conventionalized into something most unlike a curve. Here, again, the sign holds good, in the same sense— $5 \times 3 = 15$ , which is the numerative value of Chuen.

Instead of being disconcerted by the fact that in the above instances the factors are not all multiplied into each other, as in the case of compound and separate characters, I am guided by it to the deduction of two important rules, which I believe will be found applicable to all Maya multiplication: first, to find the numerative value of a simple character, multiply the value of its factors singly by the number of factors if alike, and together if unlike; second, to find the numerative value of separate or compound characters, multiply the values of the different parts into each other. Thus I would account for the numerative values of Kan, Ix, and Chuen; and, finding the cleft inclosure appropriately used as a sign for multiplication in these symbols, I deem it fairly reasonable to suppose it may have the same significance elsewhere.

This deduction, whether true or false, very naturally suggests a search for indices of other arithmetical processes. The circle, with a dot or smaller ring in the center, cannot have failed to attract the attention of every student, its use is so common, especially upon all forms of the hand. I had thought that it simply indicated the character to be a numeral, but the detection of what there was reasonable ground for supposing might be a sign for multiplication led me to investigate whether this circle and dot might not also signify some particular process; and the result is that I am now inclined to the belief that, apart from its possible conventional use at times in connection with the hand—and even there, perhaps, indicating that all numbers represented by the hand are to be added—it implies addition. For instance, in the symbol for Manik the hand is closed until the space between the thumb and fingers resembles a reversed *ik* sign, to which, if it signifies 6, add the 5 that the hand itself may mean and the sum is 11, the number represented by Manik in the day series. I shall speak more fully of this when I come to the symbol for that day. In this sign for 20,




, the implication is plain that the two signs for 10 are to be added together.

I do not consider that the use of these signs to indicate addition and multiplication can by any means be regarded as proved, but a fair degree of probability is established by the examples I have given and others in keeping with them. The fact that in the codices, especially on heads, the two signs are combined, does not necessarily militate against the theory. The combination might mean that both processes were to be made use of—as, indeed, both are nearly always involved—or it may be one of the many conventionalisms whose original significance is lost. Nor do the further facts that the employment of these signs is inconstant and irregular, and that no signs for subtraction and division appear anywhere, weigh very heavily against it. The entire Maya graphic system is marked by irregularity and capriciousness, and subtraction and division were of so rare occurrence that there may have been no signs for them, or, if there were, they may have escaped my notice.

For the purpose of comparison in general and of special illustration in particular instances, a double list of day symbols is given, the first glyph in every case being the typical form of the inscriptions and the second that of the codices.

CABAN.—The Day Sign for 1.



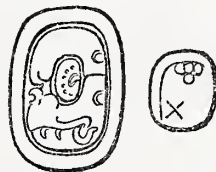
This sign is undoubtedly a cursive form of another abbreviation of the woman's head alluded to in speaking of the first of the face numerals—this . The corkscrew curl—a sign for 1—is the only remaining recognizable feature, the balance of the glyph being too indefinite to determine whether it was intended to represent the entire head or not. This is one of the symbols used to denote a day, or days, in the abstract. One of the meanings of *cab* is day.

EZENAB.—The Day Sign for 2.



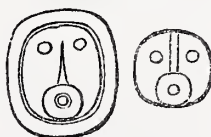
There is no feature in this sign that has a recognizable numeric value. The zigzag cross-lines, however, should be kept in mind as possibly representing 2, for they appear in other connections, particularly in the death's-head, where they may raise its value to either 12 or 20—most likely the former. They are commonly supposed to represent flint, or a flint knife. This may be true enough in some uses, while in others they may have only a numerical sense. Whether the line extending halfway around the cross-lines in the second glyph has any value, is questionable. It occurs at times, in this or in other shapes, in nearly half of the day symbols in the codices, but it is constant in only four of them. This inconstancy suggests that in most cases it is merely a device for reducing space; yet in Cib, where it is attached by bars to the rim of the glyph, it undoubtedly possesses a value, as not unlikely it may in other or all instances.

CAUAC.—The Day Sign for 3.



The very name of this day—*ca*, two; *uac*, six—implies a number resulting from some manipulation of 6 by 2. As, reckoning from any of the dominicals, it could not be the fourth, eighth or twelfth day, there remains only the conclusion that the process implied is division, and therefore that it is the third day. In the codices this position is always distinctly shown by the cross sign for 3, but that distinguishing trait is lost in the inscriptions. The *cauac* character is the sign commonly used to denote that the reckoning is by days—10 days being the period usually implied by it, as expressed in the curve surrounded by a line of dots. In this manner it is used single in the month symbols, and double, or representing 20 days, in the cycle and calendar-round, or 52-year, signs. Again, as in the superfix of the katun symbol, it has no specific value, but merely indicates that the computation is by days. So it will be seen that the sign has at least four distinct meanings—a particular day; a day, or days, in the abstract; the third day, or three days; ten or twenty days, as the sign is single or double; and I have no doubt that still other meanings will be found to attach to it.

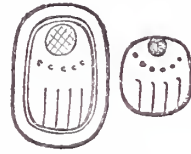
AHAU.—The Day Sign for 4.



There is nothing discernible to me why this symbol should mean 4, but that it does is evident from its employment in that sense in a 260-day and other signs. I think it is a purely arbitrary symbol intended to represent the moon, and that the name implies Sir Moon—*ah*, sir; *u*, moon—just as *ah-kin* is the equivalent of Sir Sun. The sun symbol is a sign for 13, as the moon symbol, if such it be, is for 4.

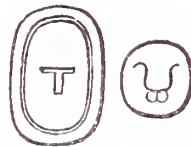


Y MIX.—The Day Sign for 5.



There can be little doubt, I think, that this symbol is one of the conventionalized forms of the closed hand, typifying a completed count of five by the thumb and fingers. The dots do not qualify the black or cross-hatched mark at the top, evidently intended originally to represent the space between the thumb and fingers when closed. They belong with the lines, and are always found with them when used to indicate finger divisions in highly conventionalized forms of the hand.

IK.—The Day Sign for 6.



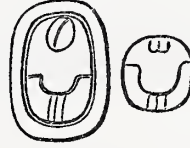
The sign in the second glyph I believe to be the older, and to mean simply  $4+2=6$ , as already explained. The other symbol shows the easier and quicker way of making the character, which would naturally be adopted in course of time. Ik ends the initial week, or period of six days. This fact, I think, will be found to account for the prevalence of what have been termed the *ben-ik* signs. Most of them will be discovered to be reckonings by 6-day periods.

AKBAL.—The Day Sign for 7.



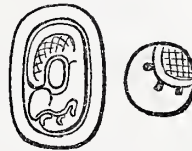
This is another unaccountable and probably arbitrary sign. The name is believed to pertain to night, and it has been surmised that the symbol is intended to represent clouds or darkness descending upon the mountains. I have no opinion about that, but I know that in some of its uses the sign stands for 7—as forming 17 in combination with the death's-head, and so forth.

**KAN.**—The Day Sign for 8.



I have explained my view of this symbol in the introductory remarks to this section. It is, that the character simply implies  $4 \times 2 = 8$ . Kan is used frequently in the codices as a numeral, generally joined to Ymix, making 13, and multiplied by the dotted reversed curves or other signs for 20 that invariably overtop them, thus constituting a 260-day sign.

**CHICCHAN.**—The Day Sign for 9.



This is undoubtedly a serpent or dragon symbol, as implied by its name and the frequent appearance of the character in the second glyph on the body of the feathered serpent. The significant feature is the cross-hatching, which is characteristic of many other signs for 9.

**CIMI.**—The Day Sign for 10.



The death's-head is invariably a sign for 10. A variant, found among the day symbols of the codices, is given, as it is used to indicate 10 throughout the inscriptions.

MANIK.—The Day Sign for 11.



I have stated my belief that the circle and dot in this character imply addition. We have here a very suggestive coincidence—an *ik* sign occurring in a symbol with an *ik* syllable in its name. I do not think it accidental, but rather that the numerical value of the glyph is specifically designated by its name: *man*, all, the whole—indicating that the full hand count of five is to be added to—*ik*, six— $5 + 6 = 11$ .

LAMAT.—The Day Sign for 12.



Evidently a simple addition or multiplication of the four small circles, indicating 3 each. The lines, in whatever shape drawn—for there are many forms other than those here given—are merely divisional, apparently, having no numerical significance.

MULUC.—The Day Sign for 13.



The symbol does not occur in the inscriptions, and it is difficult to suggest any meaning for that found in the codices. This is one of the instances where the over-arching line may have a value. If so, it should be 10, as the small circle in the center appears to be identical with those that in other places represent 3.

OC.—The Day Sign for 14.



The dog sign, most likely. In the inscriptions the full head is shown; in the codices only the conventional outlines of the base of the ear. Why the dog should represent 14 is one of the many questions that must remain undetermined until we have a deeper insight into Maya symbolism.

CHUEN.—The Day Sign for 15.



Three curves, indicating 5 each, multiplied by their number— $5 \times 3 = 15$ . Why the central curve should have been dropped from the symbol in the inscriptions is inexplicable, as it is retained in other *chuen* signs; but the same elision is noticeable in the symbol for the month Tzec, where, multiplied by 20, the product is 300.

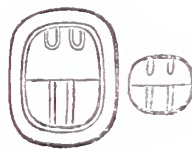
EB.—The Day Sign for 16.



There is a contradiction in these symbols, the only one that occurs in the whole list. The second sign might imply that the value of the dotted curve was to be added to that of the 6-eye— $10 + 6 = 16$ ; but the face in the first glyph is plainly enough intended for a death's-head, which must upset this calculation—unless, as in so many cases, the value of the face is simply affirmed by duplicate signs. The eyes, it will be seen, are practically the same—the concentrically ringed one, or 6-eye, in both cases.

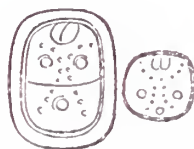


BEN.—The Day Sign for 17.



There is no numerical significance in the constituent parts of this character, that I can detect; yet it must be constructed in accordance with some arithmetical principle, for, either in this or some slightly modified form, it constitutes part of the numerous *ben-ik* signs, which unquestionably always have a numeric value.

IX.—The Day Sign for 18.



The small circles, signifying 3 each, raised to double their value by the surrounding dots, and multiplied by their number— $3 \times 2 \times 3 = 18$ . It not unlikely represents a tiger-skin also. The Mayas were apt at detecting resemblances and coincidences, and prompt to avail themselves of them to enrich and diversify their graphic system.

MEN.—The Day Sign for 19.



Another symbol that does not occur in the inscriptions. The character found in the codices appears to be made up of the death-face, the 6-eye, and a rudimentary hand-sign that everywhere has the value of  $3-10+6+3=19$ .

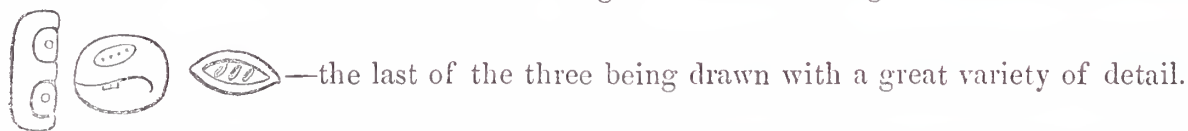
CIB.—The Day Sign for 20.



Though this symbol appears to be a compound, its elementary parts are not easily determinable. That, in its entirety, it stands for 20 is established by the fact that it is one of the signs employed to denote a day, or days ; in which use it is always accompanied by a sign for 13, the product of the two being 260—the number invariably indicated by all the abstract day symbols.

## OTHER NUMERAL SIGNS.

HAVING given separately the only complete series I know, except the dot-and-bar one, I shall present collectively some other numeral signs, of whose value I am tolerably confident, merely arranging them under appropriate heads. I do not include the dot-and-bar series—in which each dot represents one and each bar five—it being too familiar to most of the parties into whose hands this work is likely to come to require reproduction here; yet there are two or three things concerning it of which the best informed of them may not be apprised. In the first place, the curves, angles, and crosses, which sometimes support a single dot or separate two dots, have no value, but appear to have been introduced to avoid blank space or to render the glyph more symmetrical. Next, there are three signs for 20 that go with this series—



The first of these signs is used almost exclusively to designate the beginning, or 20th, day of a month, while the second is employed in ordinary computation. Their value, in these respects, has been correctly stated by a number of persons; but the same authorities have declared the last of the three to be a sign for naught. They were led into this mistake, undoubtedly, by its peculiar use and position. It is employed in the codices solely to designate initial periods, and in that position it is the equivalent of 20 in all cases except that of the chuen, where, like the other 20-signs, it denotes but 18. I shall speak more fully of this exception later on. Finally, in some instances the dots and dashes in themselves do not express the full notation, but are coupled with other signs whose value must be added to theirs in order to complete it—as in

these combinations, , which denote respectively 17 and 18. The

same perplexing practice was indulged in with the face signs and other forms of numerals.

In both the annual and chronological calendar, 20 takes precedence of the unit in enumerating the days, ahaus, and katuns. This results from the Maya practice of not counting any period until it had wholly passed, for which purpose a period was always given a numeral designating the number of the preceding one, reckoned according to

our style of numeration. Thus, their twentieth was what we would call the first; their first, what we would call the second; and so on, the numbers always being one less than the order in which the periods actually occur.

For a long while, misled by reputed authorities, I attributed the sense of naught, or no count, to the signs for an initial period, which in some respects is certainly preferable to designating it as the twentieth, the notation being rendered easier and more readily comprehensible. For instance, 9—0—0—0×0 is a more intelligible notation than 9—20—20—18×20, and it practically amounts to the same thing; for, in respect to the initial period itself, the 20 is only an equivalent of 0, it pertaining, in reality, to the preceding period and no additional count having accrued in the new reckoning:—in other words, all numerals, when employed to express periods, are used in their ordinal, not their cardinal, sense; the foregoing notation reading: the 9th cycle, 20th katun, 20th ahau, 18th chuen and 20th day—not: 9 cycles, 20 katuns, 20 ahaus, 18 chuens and 20 days.

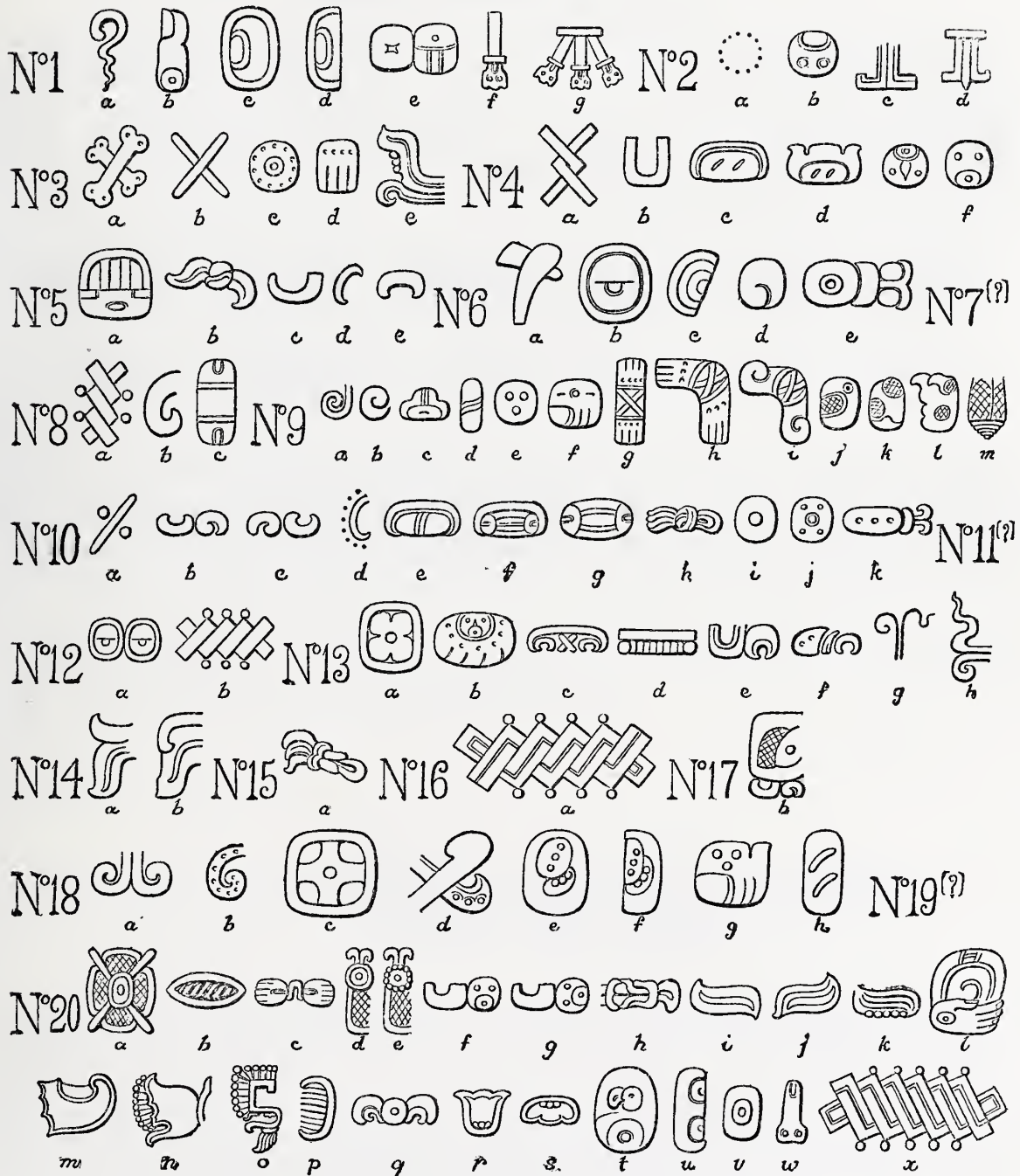
But while this no-count method was easy and apparently gave true results, reflection convinced me that, despite all the assumed authorities, there could be no naught in the Maya numeral system, as there was no necessity for it. The cipher belongs exclusively to the Arabic scheme, between which and the Maya there is no affinity. So far as the Maya is analogous to any style familiar to us it is to the Roman, in which there is no character for naught, as the cipher by itself would be useless for purposes of notation and its employment in compounds out of keeping with the spirit of the system. Having thus arrived at the conclusion that the signs qualifying initial periods did not imply no count, it remained to establish what they did mean. From the practice in similar instances, and the use made of some of these signs in other relations, I became satisfied that the initial period in all cases was given the highest number belonging to its particular class. It was manifest from several inscriptions in Palenque and Quirigua, that the thirteen cycles constituting a great cycle were numerated 13, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. The reason for this—the numeral in all instances being intended to denote the number of cycles fully elapsed—should be equally applicable to all other classes of periods. Moreover, the sign marked *u* in the list of 20 signs, made use of to denote that a date falls on the first day of a month, is sometimes varied to the symbol marked *t*, which in other places unmistakably has the value of 20. Then, in the lunation tables of the Dresden Codex the elliptical character, *b*, which elsewhere designates initial periods, always occurs—except in the chuen line—where the sum of the added factors is 20. Again, the sign most commonly employed in the inscriptions to designate a beginning katun, ahau, or chuen—that marked *a* in the same list, and which, by the way, I consider to be merely a conventionally quadrated knot—occurs frequently where multiplied by other figures (the process involving an ascription of the value of 20 to this) the product is 3,600, and in this relation it becomes the characteristic feature of one of the 10-ahau symbols. This is



proof of tangibility, at least. Naught is not multipliable—hence this sign must have some numerical value ; and, as it commonly occurs where according to the Archaic style of numeration we should expect to find 20, it is reasonable to assume it stands for that number. There is the same difficulty here in the way of such an assumption, however, as in case of the other signs for 20. This glyph is used to designate an initial chuen also—a period whose extreme numerative limit during the Archaic era was 18. But I do not regard this as conclusive against it being a sign for 20. Its use, in this respect, may have descended from a time when the ahau was composed of twenty chuens, the sign being retained through habit notwithstanding a change that made its use inappropriate. This is rendered probable not only by the retention of other obsolete usages, or usages that had lost their original significance, but by the fact that the Cakchiquels till the last reckoned by periods composed of twenty chuens—a survival, very likely, of a cruder form of the calendar antedating the improved ones of the Archaic people. While speaking of this character, I would state that its value is not a discovery of mine. Observing its frequent occurrence in the initial series of the inscriptions in positions where one would expect to encounter numerals, and noticing that the dot-and-bar numbers nowhere went above 19, Maudslay long ago declared it to be his belief that the character in question was a sign for 20—so that I only substantiate his shrewd conjecture.

What I have said of this particular character in connection with the chuen symbol is equally applicable to other signs for 20 when used in the same relation—they all indicating but 18 in that position, though elsewhere invariably standing for 20. This fact appears to me to be in the nature of cumulative evidence that originally there was a 20-chuen period, and that through long use the people had become so accustomed to seeing the initial chuen designated similarly to the corresponding ahau and katun, that it was deemed advisable to make no change in this respect when the calendar was reformed. Hence, I do not think the exceptional contradictory use in connection with the chuen period should exclude any of these initial signs from the list of numerals that represent 20, where they properly belong.

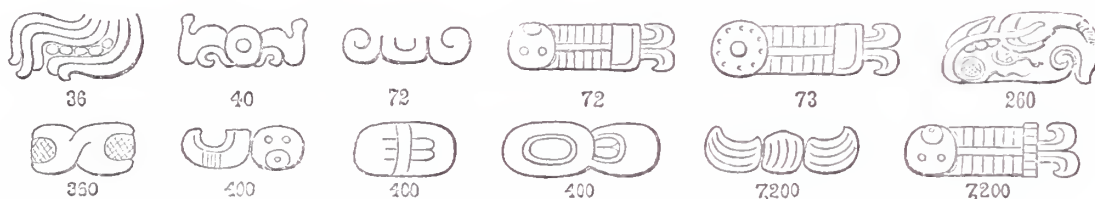
## SIGNS FOR NUMBERS FROM 1 TO 20.



In the introductory remarks to this section, and elsewhere, I have stated my reasons for attaching the value I do to some of the characters in the foregoing list. Those not already explained will be referred to hereafter, in other connections.

## SIGNS FOR HIGHER NUMBERS.

In the subjoined list the value of each sign is placed under it. The reason for the assignment of that value has already been given in some cases, and in others it will be subsequently explained. My purpose in collecting them here is to place all the numeral signs together for convenience of reference.



I not only believe that there are many more signs for these particular numbers—essential to the Maya methods of reckoning—but that there are signs for their multiples, and other higher numbers equally essential, which will soon be identified.

## NUMERAL VALUE OF THE MONTH SYMBOLS.

WHILE dealing with the subject of numerals, I think it worth while to reproduce a list of the month symbols, arranged to illustrate a theory of mine that they are constructed on a strictly mathematical plan and successively denote the number of days from the beginning of the year to the end of the month symbolized—if, indeed, they have not also ordinal values from 1 to 18. This latter possibility is suggested by the fact that in a certain formula, otherwise invariable, the *zotz* symbol in one instance replaces the sign for 14, which is the number of the month *Zotz* in the proposed arrangement; but as I have not found any other of the month symbols employed similarly, I do not attach undue importance to this coincidence. The numerical order of the months begins with *Chen*, showing that there must have been an earlier form of the calendar in which the year commenced with that month, just as *Caban* was originally the initial day. These indications of calendar changes give significance to the statement in the *Yucatec* chronicles that “*Pop* was put in order” at a certain date, and lend probability to the conjecture that the *ahau* was at one time composed of twenty *chuens*.

To the month symbols found in the inscriptions—which are placed first in the list—I have added those of the codices, as in a number of instances the latter reveal the original design, which is obscured or lost in the former.

1. **CHEN.**—20 days.



It is a curious if not significant fact that both in the codices and inscriptions this symbol is the most variable of all the signs for the months. The first four here given are from the inscriptions; the others are from the codices. There is no numerative feature in them that can be positively recognized, beyond the *cauac*, or 10-day sign, in the first two. What the accessories and other signs mean, I am unable to say, though I infer they are intended to designate it as the initial month.





The combination here is simply that of the 10-day symbol with the *yax* sign for 4— $10 \times 4 = 40$ . The value of the *yax* sign is one of the best established in the whole group of numeral characters.



Here we are compelled to reverse the process, and reason from its association with the 10-day sign that the superfix must have the value of 6— $10 \times 6 = 60$ .



Here, again, the value of the superfix must be deduced from its connection— $10 \times 8 = 80$ —the character occurring in no other place where its value is determinable.

## 5. MAC.—100 days.



The superfix in the first glyph is one of the signs used interchangeably for 20, but the head is unrecognizable. The second glyph, from the codices, enlightens us respecting its meaning, however. It is one of the conventional symbols for the closed hand, signifying 5, and is multiplied by the most unmistakable of the 20-signs— $5 \times 20 = 100$ .

## 6. KANKIN.—120 days.



The cornstalk symbol in both these glyphs is qualified by a 10-sign; hence the former must be an equivalent of 12— $12 \times 10 = 120$ . The *kin* character in the first glyph does not appear to affect the value, only its name. The *kankin* symbol is one of the signs employed to denote that a reckoning is by days, but, very consistently, its use is confined to computations by 120-day periods.

## 7. MUAN.—140 days.



This glyph is inexplicable, further than that the wing in the first one should denote 20, in which event the bird's head must be equivalent to 7; but the character is drawn so differently at different times that it is not safe to assume anything concerning it.

8. PAX.—160 days.



Here we have the unmistakable 5-sign qualified by two overspreading upshoots, which combined must have the value of 32, whatever they may be singly. I do not think the triple subfix to this symbol has any significance, any more than in Yax and Zac. Its use is inconstant, and it probably serves as a mere pedestal, or is a meaningless survival of the 72-sign employed with this symbol in its ahau and katun capacity.

9. KAYAB.—180 days.



The square cross, a sign for 18, appears to derive no additional value from being incased in a turtle's head, as in the glyph from the codices the multiplier is plainly 10— $18 \times 10 = 180$ . The subfix of the other glyph being merely a beginning sign, it follows that the postfix must also be a sign for 10.

10. CUMHU.—200 days.



The *kan* symbol in this glyph being equivalent to 8, the superfix must necessarily represent 25— $8 \times 25 = 200$ .

UAYEB.—5 days not counted.



Here we have the 5-day symbol again. As we know these five days were not counted, the superfix to this glyph has particular interest. If there were any numerative quality about it, it could be only 0; but having come to the conclusion that there is no cipher in the Maya numeral system, and it being an absurdity to say that these five days do not exist at all, we must reject the supposition that it stands for naught, and attribute to it the sense that these days are ignored or not counted. In this light the sign assumes great importance, and it may point the way to the reading of Maya texts other than those involving numeration. The symbol is here given the place it occupies in the later arrangement of the calendar, but in the primitive order of the months it probably followed Mol.

11. POP.—220 days.



In this symbol we have a more complex form of computation than has yet been encountered—the interlocked right-angles, 4, the square cross, 18, and the reversed curves,  $10-18+4=22 \times 10=220$ .

12. UO.—240 days.



I am unable to suggest any explanation of the value of this symbol. It is not positive that the character which surmounts it is the *yax* sign, as the glyph is very indistinct everywhere that it occurs in the inscriptions. Then, the cross, which ordinarily would mean 3, is qualified not only by an overarching band in the inscriptions, but is placed upon a black background in the codices, showing that its value is subject to some modification not comprehensible at present.



13. ZIP.—260 days.



The remarks concerning Uo will, in the main, apply to Zip—only that in this case the superfixes are identical with those in the symbols for Ceh, where they have the value of 8.

14. ZOTZ.—280 days.



This is another symbol whose value is not clearly traceable. It not infrequently has the *akbal* sign at the top of the head. As 280 is a multiple of 7, it may be that the requisite multipliers are indicated in some way I have failed to observe. I have spoken of this symbol being employed in one place for 14.

15. TZEC.—300 days.



This is the *chuen* symbol, or day sign for 15, multiplied by 20— $15 \times 20 = 300$ . The bottom curve is omitted in both the month and day sign in the inscriptions.

## 16. XUL.—320 days.



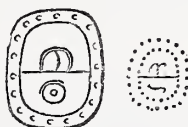
If the wing in this symbol were of the ordinary form, indicating 20, it would only be necessary to ascribe the value of 16 to the head. But the wing is always of a peculiar shape, which fact, in connection with the occurrence of a character closely resembling one of the signs for 20 on the back of the head in the first glyph, induces me to think that the values should be reversed—the head representing 20 and this particular form of wing 16.

## 17. YAXKIN.—340 days.



This is another symbol involving a complex calculation, the values of the *kin* and *yax* signs being added together and multiplied by that of the wing— $13+4=17 \times 20=340$ .

## 18. MOL.—360 days.

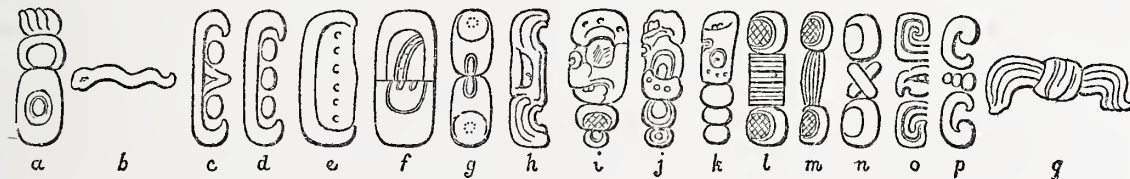


This is the only month symbol consisting of but a single character—that is, the main sign having no affixes or accessories of whatever kind. I mention this fact because it enables us in the important inscription on the Palenque steps to identify a date that otherwise would be indeterminable. The dots double the value of the circle or circles constituting the border of the glyph, raising it to either 20 or 40—it not being clear whether an inner circle is intended or not—while the central character, to correspond, may be either 18 or 9, it is impossible to determine which in consequence of the variability of its representations.

It may be thought by some that the showing made is not sufficient to establish my theory, or even to justify its announcement. Perhaps it is not, but I am content to rest under any suspicion of unsound judgment that may be evoked by it until such time as fuller knowledge shall bring my sure vindication. It is by such ventures only that we can hope to make progress. There can be no advancement in holding safely to gained knowledge. The fact of to-day was only a theory yesterday, and the theory of to-day may be a fact to-morrow. So, wherever conjecture points with a reasonable aim, we should go; for, though in ninety-nine cases it may prove to be but a rainbow chase, in the hundredth we may find the bag of gold. The instances in which a trial-balance, as it were, can be got on any character or set of characters are so few that not a single one of them should be scorned. This is one of the best I know. It is not that the numerative value of the month symbols is of so much importance in itself, as that, if my theory be correct, it helps to demonstrate that a mathematical plan underlay all Maya symbolism and furnishes an infallible test of the value of a considerable number of characters.

## SIGNS DENOTING BEGINNING.

THOUGH not numerals, there is a class of signs so nearly of a numerative character that they may properly be introduced in this connection. These are the signs indicating beginning. The number is undoubtedly greater than here given, but there are some of which I am doubtful, and they are therefore withheld. The nature of these signs is unmistakable, as they occur only where their meaning is plainly implied. Thus, whenever the sign marked *a* accompanies the day Ahau in a date, the date will be found to be the beginning of an ahau. In like manner, the sign marked *b*, over Ahau, indicates it to be the beginning of a katun. The other signs, in whatever position they may occur in connection with a period symbol, denote that it is a beginning day, the beginning of the period, or that the particular period is the initial one of the series to which it belongs.



The last sign in the list is the only one of which I have the least doubt. It may possibly be a sign for 20—all the above symbols occupying a position so liable to confound them with signs for that number that it is difficult at times to distinguish them; but my best judgment prompts me to include it in this list.



## NUMERAL WORSHIP AND THE BUILDING UP OF THE IMAGES AND PERIOD SYMBOLS.

It is an apology I have already made, and shall have to make repeatedly, that much which is set down in this work appears to be little more than assumption on my part; yet there is not a statement in it of whose truth I am not as firmly convinced as though it had passed the ultimate ordeal of proof. The difference between sighting a conclusion toward which you see many shadowy things all pointing directly and of arriving at it finally by a broad highway of incontestable evidence involves, in most cases, the labor of years to construct that plain thoroughfare. The premature publication of this fragmentary study has not allowed me time to make good roads in all directions, but I have projected my theories along no line where I do not clearly see firm ground and the material with which a solid road-bed will eventually be built. After long experience with these shadowy guides, one comes to have a sort of intuition as to their trustworthiness; and, in case it be favorable, and there be unanimity among the indices and reasonableness in the conclusion they point to, the intuition becomes transmuted unawares into conviction. The frequent instances in which for lack of time I have had to dispense with forthwith proof, but have found that it came surely later on, have inspired me with a great deal of faith in this intuitive instinct; and so I am going to base the most daring theory of all on little else than it—if at the conclusion of this chapter the reader shall be pleased to regard it so.

The entire Archaic fabrication—glyphs, period signs, ornaments, idols, stelæ, altars, and altar-pieces—was, in my judgment, built up of numeral symbols and dedicated to number worship. The whole thing was a cold-nosed mathematical calculation from the bed-rock up. I speak in the vernacular of my habitat, for I had rather my unlettered neighbours of the Pacific Slope should understand me than both the literary and scientific worlds. Each of the day signs had a numerative value. There were periods of days that had their respective signs. The month symbols were built up of added or multiplied numerals, either in connection with or apart from these numerical day periods. In the ordinary form, the ahau was built up of 5 multiplied by 72; the katun of the ahau multiplied by 20; the cycle, of  $20 \times 7,200$ ; the great cycle, of 20 katuns multiplied by 13; and the grand period, by a combination of numerals so

intricate I have not found time to analyze them. This was only the ordinary—the cheap form, so to speak. They builded most of the period symbols in other shapes as well—principally in the guise of grotesque faces having a reptile, bird, beast, or human semblance; but in whatever form they appear, every principal feature—eye, ear, jaw, etc., or the ornament substituted for it—is constructed from a numeral or a combination of numerical signs that in the aggregate denote the period, and usually denote it over and over again. So with the altar-pieces of Palenque; they are simply builded up by numeral signs from the 1, 5 or 20 day sign at the bottom to the 136,656,000 day sign, or great dragon-bird, at the top. So, again, when the massive stelæ at Copan and Quirigua are reached. The colossal images on them are nothing more than compositions from numeric symbols. Their eyes, ears, ornaments, and all the elaborate accessories simply resolve themselves into number signs.

I arrived at a similar conclusion concerning the codices long back, but it never occurred to me that anything analogous would be found in the inscriptions until the discovery forced itself upon me a short time ago. The two conclusions were so entirely separate in my mind, and were arrived at by such distinctly different processes, that I hold them to be strongly corroborative of each other. This for a slight substantiation of my intuition; but to proceed:

If idols and altar-pieces constructed purely of numerical signs were objects of worship—as indicated by the priests, decorated in appropriately numerated regalia, making offerings to them—then it is certain there must have been a deification of numbers and an uplifting of them as objects of adoration. The concept is so novel that at first thought it seems absurd. But at second thought, would it be so ridiculous for us, even, to venerate them?—the only true, infallible and absolute things we know of, or at least the only ones we can comprehend. Eliminating pretended revelation, eliminating the efforts of fiery apostles—eliminating, in short, all superstitious influences—I know of no object of veneration to which the mind of man should as readily turn as to mathematics, the single force whose constant pressure, by manifold ways, elevates from savagery. Fortunately the Archaic Mayas lived before the time of Moses and Paul, and escaped the unhappy fate of the later Maya nations, to whom Moses and Paul were preached with accompaniments of torture. They had nothing in the shape of revelation or apostleship to affect them, and naturally gravitated on the line of least resistance—in other words, according to their own inclination—to a form of worship. The one great thing that impressed them was that they had arisen from savagery through their discovery of the power of numbers, and that the science of numbers was what had kept on elevating them, till it finally achieved an apparently superhuman triumph in the perfection of their marvelous calendars. What wonder, then, that they ascribed to the numerals supernatural power, and deified them? Other peoples have sanctified objects for a thousandfold less reason.

Let the reason be what it may, that they did deify numbers and make them objects

of worship is certain. By the features, breastplates, and ornaments of the idols, taken in connection with other numeral signs surrounding them, it is easy to distinguish the god 4, the god 13, the god 20, and so on. But the favorite or greatest god—the one to whom they built everywhere the most and largest monuments—was the god 1. This is unmistakable, from the fact of the identity of the face and ornaments with that of 1 in the series of face numerals. And it is probable, too, that 1, being the basis of all numeration, should come to be looked upon as the Primal Number—the First Great Cause. Research may yet show that all systems of religion were originally built upon a similar plan of numeral worship. If polytheistic, there need be no limit to the number of gods; if monotheistic, it is only necessary to suppose that all but the principal deity have been eliminated, and that the god 1 has become the One God.

#### ELEMENTS OF THE AHAU SIGNS.



In illustrating the building up of the period symbols I am compelled to confine myself more particularly to the ordinary form, because the faces are too obscure and variable to be analyzed with anything approaching certainty until we have a better knowledge of Maya symbolism. I shall therefore give but a single example of the heads in each instance. The samples to be given are selected from Stela N, Copan, for the reason they are of a declarative character, showing that they are built upon each other. In the highly ornate initial dates the ahau, katun and cycle are all represented by birds—the one symbolizing the ahau being a most extravagant conception, with legs extending to a length that finds no parallel in nature. Hence it is likely that the arbitrary symbols for the periods had their origin in mythological associations or in some ancient fad for grotesque personification, in either of which cases it will be very difficult to discover the reason for assigning to them the particular values they represented.

The principal feature in the ordinary symbol for the ahau is that which characterizes the face sign for 5. Besides this there is only a suffix, usually so conventionalized that it has no definable character beyond that of three irregular little blocks or balls; but wherever it is carefully drawn it is shown to consist of two coils and a squarely-indented centerpiece. As we find that in other places the two coils by themselves represent 13, and that the angular centerpiece in other connections has the value of 4,



the conclusion is unavoidable that here these numbers are multiplied together, making 72, which serves as a multiplier to the 5 represented by the main character of the glyph, producing a total of 360, the number of days in an ahau. This supposition of the value and use of the characters here will be strengthened by other circumstances as we proceed.

In the second glyph given above the subfix is omitted. Such omission is frequent, even with the other form, while at times only two blocks appear; from which it is only reasonable to infer that the symbols were supposed to be so unmistakable in consequence of their connection and position that it was not deemed necessary to draw them elaborately. As this sign should undoubtedly have the same subfix as the other, it must in some way represent 5 also. In this particular case it has the symbol of the day Ahau in the top of the head—giving no additional value to the glyph, however, but merely declaring its quality.

#### ELEMENTS OF THE KATUN SIGNS.

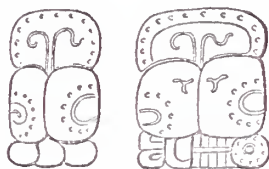


The ordinary katun symbol is simply the ahau sign raised to twenty times its value by a superfix. This superfix consists, in most instances, of a centerpiece supported on both sides by the comb-like sign for 20; but in some cases there is but a single support—a circumstance that justifies the opinion that the duplicate form is made use of merely to give symmetry to the glyph. The centerpiece is usually the *cauac* sign for 10 days; but in this connection it does not appear to have any value, further than to emphasize the fact that the computation is by days.

The face symbol here has the subfix (conventionalized into three mere balls), while the superfix is absent. As many of the heads have the superfix also, it is a matter of doubt whether their value is variable, according to its presence or absence, or not. The sign of the day Ahau in this head is inclosed in either a dotted wing or the fringed dragon-jaw—both characters for 20—thereby explicitly declaring the glyph to be the equivalent of twenty ahaus.



## ELEMENTS OF THE 52-YEAR SIGN.



In this symbol there is a departure from the reckoning by a 5-day period. In its place we have a 20-day period, represented by the two 10-day signs. The subfix here is 73. What the nice distinction is between the sign representing that number and that representing 72 it is impossible to tell, except when both are expressed by the bouquet-like characters, owing to the worn state of the inscription everywhere that the other 73 sign occurs. The product of 20 multiplied by 73—1460—is multiplied by the 13 denoted by the character in the superfix, making 18,980, the number of days in 52 years, or a calendar round. I know of no face sign for this period.

## ELEMENTS OF THE CYCLE SIGNS.



Singularly enough, the same departure from a 5-day reckoning is found in the cycle symbols. Instead of simply raising the katun sign to twenty times its value, as might be expected, the value of the katun—7,200—is transferred to the subfix, while the 20-day symbol constitutes the principal feature of the glyph.

It is the same with the face symbol. The cycle face is a 20 sign. In the glyph here given the subfix is so conventionalized that all its details are lost, but in other places the striation is perfectly distinct, showing that, as in the other symbol, the calculation is:  $20 \times 7,200 = 144,000$ .

## ELEMENTS OF THE GREAT CYCLE SIGN.



Here the reckoning reverts to the 5-day period. It is multiplied by 72, making an ahau ; that by 20, making a katun ; that by 20 again, making a cycle ; and that by 13, making a great cycle. The last multiplier is the outflaring trinal character at the top. It is a 13 sign, duplicated to balance the glyph. The two 20 multipliers appear only in the first of the symbols given above—or, rather, only in that does the single one extend all the way to the bottom, as is commonly the case. There should be two separate signs, however, as shown in some of the glyphs ; but I have selected these particular specimens for another purpose, which I shall presently state. The 20 sign in the first glyph looks like anything but the same sign in the other two, and resembles a fish more than anything else. Yet they are identical in character, both representing the feathered dragon—the fringed jaw alone of which, reduced to the cursive comb-like character, is the commonest sign for 20. The evolution of this character is so curious and interesting that I herewith give a series of glyphs—all taken from great-cycle symbols—showing the gradations :



The reason why I selected the particular symbols given above is that I think the number of the great cycle is specifically stated in them. Close observers will have noticed several peculiar things about the great-cycle character. The most peculiar of these is that, while the form of the katun symbol is preserved in it fully in every other respect, the *cauac* sign disappears from the superfix and is replaced by some other character. In more than three-fourths of the dates in the 54th great cycle a dragon's head occupies its place ; a tiger's head predominates in the 55th, while the remainder is made up of faces and signs that may represent a day, a cycle, or some other period. Whatever their character, they have no peculiarities that can at present be construed into numerals, except in case of the three glyphs here reproduced ; so, if the others have any numeric value, it must be arbitrarily expressed. The three in question

indicate the 54th great cycle, and I think that all of them announce that fact, but each in a different way. The center of the katun superfix in the first is composed of a sign for 18 and a face. If it were plainly the face for 3 we should be left in no doubt; but, in consequence of the defacement of the stone, it is impossible to determine if a band—the characteristic of the 3 head—extends across the forehead or not. In the second glyph the *ik* symbol—a sign for 6—appears in an inclosure that probably represents 9, but, as the coil is not clearly discernible, we are again left in uncertainty. The third glyph has the meaningless face, which elsewhere serves as a mere vehicle for numerals, bearing a sign for 9, surmounted by three objects evidently intended for spheres whose value is doubled by the dotted lines in them—rendering it probable that the combination was designed to express:  $9 \times 6 = 54$ . I make no claim to absolute certainty in any of these cases; but, however uncertain the renderings may be separately, they collectively derive a high degree of probability from a single significant fact. The unmistakable numeral sign in each glyph is a divisor of 54. That these glyphs—the only ones with recognizable numerals—should contain signs for three out of the six numbers by which 54 is divisible, is a circumstance too singular to be attributed to accident when a more reasonable explanation is to be found in the theory that these three particular figures were chosen with the definite purpose of arriving at that number.

#### SIGNS FOR THE GRAND ERA.

I shall attempt no analysis of the dragon-bird symbol, which I believe to represent the grand era, as I have never found time to devote to the unravelment of its intricacies. There is one thing about it, however, that is apparent without much study. It is not built up from signs for minor periods, like the other symbols of the chronological calendar, but seems to be composed of a great number of miscellaneous numeral characters that are recognizable combined with a still greater number whose value is yet unknown. I think that this departure in its construction from the plan pursued in symbolizing the katun and great cycle is due to the fact that the grand era is not a period belonging to the chronological calendar alone, but to the annual calendar as well—in short, representing and crowning every style of time reckoning—and that the unusual and complex character of its symbols was intended to express this fact. The reason that induces me to ascribe to this symbol the significance I do, is that everywhere it occurs it always overtops the other time symbols, of whatever character, as if all forms of reckoning tended towards and finally culminated in it.

## NUMERIC FEATURES OF PERSONAGES.

I have stated my belief that, with the exception of the priests and their assistants, all the personages of the codices and inscriptions, ornaments and accessories, were composed of numerical signs. I shall not go into the matter very extensively here, as anything like a full exposition of it would consume too much space; but I will give examples enough to make my theory intelligible and enable those who may be interested to pursue the subject at further length themselves. As one of the best illustrations that could be found, I shall take from the codices the head of what has been called "the long-nosed god." I select that particular head, not that it bears out my theory any better than others, but because some of the features to which I wish to direct attention are more prominently shown in it. Here it is—both whole and dissected :



Every line of the head is in the fragmentary parts, four of which are intelligible numeral characters or combinations. The center of the ear ornament is the circle sign for 10; the upper part, one of the coil signs for 9; the two pendants, each a sign for 2— $10 \times 9 = 90 \times 4 = 360$ . The ear ornament and the numeric eye express that number almost invariably. The nose here is a sign for 13, reversed from its usual position and slightly modified to adapt it to the purpose of a feature. The particular character for 13 intended to be represented is undoubtedly an ornamental combination of the 9 coil and the double right-angle sign for 4, as evidenced by the angular depression shown in the outflaring part of the symbol wherever it is found carefully drawn; but such a marked indenture would render a nose too grotesque for even Maya art, so they softened the outlines. A survival of the upturned 9 coil, so prominent here, is to be found lying prone upon the nose in many of the grotesque faces of the inscriptions, affording strong presumptive proof that in all such cases the nose has the same numerical value as here. The ornament on top of the head also has the 9 coil, raised to four times its value by a corresponding number of square attachments, and that value multiplied by 10, represented by the double knot constituting the rest of the character, produces the



usual result— $9 \times 4 = 36 \times 10 = 360$ . The eye—whose peculiarity, it has been asserted, is the distinguishing trait of deities—is nothing but an abbreviated 20 sign raised to three times its value by the attachments and multiplied by 6— $20 \times 3 = 60 \times 6 = 360$ —the 6 here being represented by either the *i/k* or the concentric irid, it not being plain which was intended. I do not know what value the mouth represents, though this particular kind of mouth always suggests to me the interlocked sign for 4, which might be qualified here by the chin line and peculiar teeth; nor have I any suggestion at all to make concerning the lines forming the top of the head, though I have no doubt they express some number.

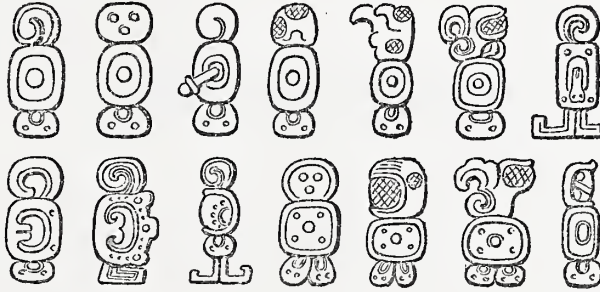
As the best test of the numerative value of quite a number of characters is their connection with the ear ornament and numeric eye, I subjoin two lists of those features, selected from different inscriptions, which will illustrate their importance in symbolism. The carelessness of the sculptor or draughtsman here, as elsewhere, is a great drawback, and the difficulty of noting nice distinctions is rendered more serious in many instances by the present defaced condition of their work; but enough can be made out to serve my purpose.

#### NUMERIC EYES.



The carelessness on the part of the sculptor, which I mentioned, is that he is not always particular about the number of dots that designate how many times the value of the 20 sign is to be increased. This may appear like begging the question, but I will by and by show that these same sculptors blundered even worse in more important respects. The only one of the eyes of whose value I have any doubt is the third in the list. It may be identical with the first, but there are so many instances where the nice distinction between them appears to be observed that I have assigned it a separate place.

## NUMERIC EAR ORNAMENTS.



The superfix of the ear ornament is here indicated to be 9 in every case except the last, where it must represent 18. The center part is either 20 or 10, accordingly as there is one or two signs for 2 underneath it.

To extend this showing to every detail of the personages and ornamentation would carry me too far from my main purpose, but I am convinced that the same numerative principle runs undeviatingly throughout the whole range of Maya pictorial and graphic art; in short, as I said at the beginning of this chapter, the entire Archaic fabrication—glyphs, period signs, ornaments, idols, stelæ, altars and altar-pieces—was built up of numeral signs and dedicated to number-worship.

## MISCELLANY.



THERE are many things I desire to state that in a brief abridgment like this cannot be brought under the general heads to which they properly belong, so I shall bunch them together without any particular order, though endeavoring to preserve arrangement enough to avoid confusion. Some of this matter might have been forced into preceding chapters, and some might be crowded into sections that will follow; but as a portion of it would not be pertinent in either place, I have concluded to let it all go into one general lot of miscellany.

One of the most perplexing questions concerning the inscriptions is—What do the subfixes to the day and chuen symbols mean? That which supports the day characters is so like the sign for 72 accompanying the ahau and katun symbols that they might be supposed to be identical, though it is not quite obvious if the centerpiece in the day subfix is intended to be angular. But 72, or any other multiple of 9 or 18, can have no significance, that I can conceive, in connection with an ordinary day sign. The figures that usually run with abstract day symbols are 13 and 20. The number of the cardinal days, the number in a day round, the number in a year—none of them is divisible by 9 or 18. As the day symbols in the codices have no subfixes, as subfixes are but seldom attached to the day signs at Palenque, as the character of the subfixes, wherever they occur, never varies, I am inclined to think that they have no significance whatever, but are mere pedestals, such as support so many other objects—only that in this case they are more ornate than usual. There is a possibility, however, that this subfix, which is distinctively the badge of the ahau and katun, may have been attached to other time symbols when they were partisans of those periods in a chronological reckoning—just as all the members of a team wear the same colors in a sporting contest.

I know of but few cases where the day symbols have affixes, other than the ordinary numerals, that qualify their meaning beyond a doubt. Two of these are where the date is indicated by the signs already spoken of to be the beginning of an ahau or a

katun. Another is the occurrence, in a very obliterated glyph near the end of the Tablet of Inscriptions, of an illegible character over what I believe to be the symbol for Oc. I am at a loss in regard to its possible meaning. If it could be made out, it might help to explain the importance that appears to attach to Oc in the Palenque inscriptions. I shall refer to another case when I come to speak of declarative signs. There remains only the employment of the bouquet-like sign, indicative of the beginning of an ahau, in connection with symbols for other days than Ahau. But a single instance of this occurs in all the Palenque, Quirigua and Copan inscriptions, that on plate xvi. of Maudslay's Copan, and there I think it is a mistake in the drawing—the day in the original being Ahau, not Lamat. In Menché, however, the sign occurs unquestionably several times with other day symbols—a fact that will furnish an interesting subject for investigation when the public is favored with the inscriptions from that city.

The characters used in composition to express a day or days, when no periodicity is involved in the statement, are composed in nearly all cases of numeral signs whose values multiplied together produce 260. The probable explanation of this is that in their calendar capacity there were 260 specifically designated days, constituting the day round, which fact was intended to be conveyed by a symbol denoting that number, while the one or more days it was desired to distinguish from that total was indicated by an accompanying numeral.



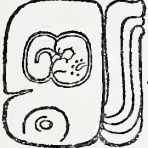
## ABSTRACT DAY SIGNS.



THE numerical value of the first of the above signs is not yet determinable. It may be that it does not possess any. One of the Maya terms for day is *cab*, expressed in the above glyph by the *caban* symbol, which is frequently used in this simple form by itself to convey the idea of a day or days in the abstract. The other glyphs are all composed of signs for 13 and 20, the first two being signs for 13 with subfixes indicating 20, and the last two signs for 20 with a 13 subfix. As is the case with all time symbols, the subfixes are sometimes absent from these, showing that the signs were thought to be well enough known to dispense with detail, if necessary. Sometimes, again, these characters will be found associated with numerals that would produce a number greater than 260; but in these instances they become symbols for periods, and are no longer mere day signs.

The subfixes to the chuen symbols are even more unaccountable than those belonging to the days, if such a distinction be permissible between things equally unintelligible. I think in this case, however, there is a numerical purpose, though all my attempts to discover the plan of it have failed. The variation in the number of the dots and curves would appear to betoken a discriminative use of them; but as identical subfixes qualify symbols representing widely different numbers of chuens, it is evident that if there be an intelligent design in their use it is a very abstruse one. There is a circumstance apart from their ordinary variation, however, that strengthens my belief in the numeric quality of these subfixes. In nearly every place where the extreme number of chuens, 18 (invariably indicated by a sign for 20), is reached, and occasionally elsewhere, the dots and curves disappear, and there is either no subfix at all or else use is made interchangeably of several signs which there is good reason for supposing to represent 400. Now, this would be the number of days in a complete set of chuens if there were twenty of them—as I think was the case originally. Is it not reasonable,

therefore, to infer that these signs for 400 have their ordinary significance here, and that their use, like that of the signs for 20 to express 18 in this same connection, is a survival from remote times? An entirely separate fact lends probability to the inference. One of the declarative signs made use of to denote that a date begins an ahau is

this: . The factors of this glyph are familiar. They are both signs for

20; multiplied together, they produce 400. There can be but a single reasonable explanation of the employment of this sign to denote an ahau—that it is a survival from the time when the ahau consisted of 20 chuens, or 400 days.

## DIRECTIVE SIGNS.

THE line between the directive, determinative and declarative signs is not a well-defined or fixed one, as at best each class encroaches on the others, while the same glyph may at different times perform all three functions. Yet I think a distinction can be drawn, speaking generally, and that it is better to try to observe it as far as possible. The number of different glyphs in these classes is very great, and that of the variants even greater, but I shall give only just enough to show their general character.

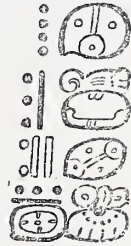
Immediately succeeding nearly all the reckonings in the inscriptions are symbols whose uniform use proves them to be signs indicating from, or to, what dates the computations extend. At times some of these characters occur where there is no reckoning in the ordinary style, which is one of the strongest reasons for supposing that a year and day count—or some other method of measuring time, notated in a manner not intelligible at present—runs alongside the ahau count in many instances, and that frequently the reckoning is carried on by such process alone.

## SIGNS INDICATING THE INITIAL DATE.



These signs occur only after an initial date itself or after a reckoning from an initial date, and usually in so isolated a way there can be no doubt their purpose is simply declarative or directive \*. Besides numerous variants of those given, there are other signs that probably perform the same office, but as their meaning is not so self-evident I have omitted them.

\* The resemblance between the last glyph in the list and the character occurring on plates li. and lii. of the Dresden Codex removes all doubt of the latter being a directive sign. It is employed so curiously in one instance that it is well worth while giving both examples of its use in order to illustrate the peculiarity. The reckonings it follows are from 4 Ahau-8 Cumhu (which, coincidentally, is the beginning of the 54th great cycle of the Archaic era) to 12 Lamat, in both cases, but with different intervals. The reading on plate li. is this :



Here the meaning, plainly enough, is: From 4 Ahau-8 Cumhu to the 12 Lamat, that is 8 days from the former (or initial) date. The reading on plate lii. is more complicated. There are two 4 Ahau-8 Cumhu dates followed by this reckoning :



The 12 Lamat is not distinct, as here, but there can be no question of its identity, the reckoning being of exactly the same character as the other. The reading here is: 4 Ahau-8 Cumhu, 4 Ahau-8 Cumhu, to the 12 Lamat, that is 8 days, 1 chuen and 5 ahaus from the 2 former (or initial) dates. The peculiarity here is that the directive sign indicates the reckoning to be from two dates—the only instance of the kind that has come under my observation.



## FROM THE BEGINNING OF A GREAT CYCLE.



The foregoing signs all occur after reckonings from the beginning of a great cycle. From this uniformity of use, and their general likeness, I think there can be no question of their being intended to express that fact. As nearly all the signs of this class are convertible, these might also at times indicate that the reckoning was to the beginning of a great cycle, or simply declare a date to be the commencement of one.

## FROM THE BEGINNING OF A CYCLE.



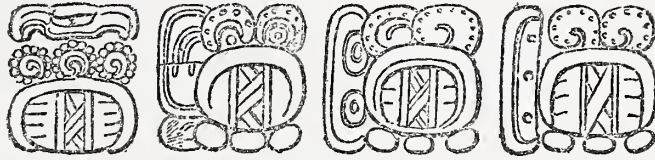
The first of these signs follows a reckoning from the beginning of a cycle; the second, a reckoning to the beginning of one—or rather, it declares the date reached to be so. The other two are not so demonstrable; but as they are among the most puzzling of the glyphs, and as they always appear to denote some kind of a reckoning from the beginning of a cycle, I put them here in order to focus attention upon them.

## FROM THE PRECEDING DATE.



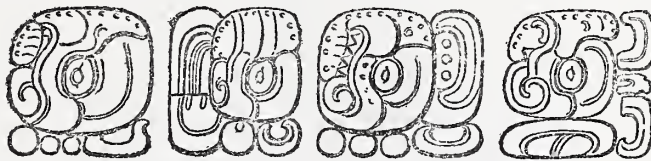
As the first three of these glyphs occur only after reckonings from a preceding date, I think their significance is limited to that; but the last glyph may at times indicate an initial date, as in several instances the date to which it refers is an initial one. The exact limitations of all the other directive signs, as well as this, can be settled only by longer study than I have been able to devote to them.

## FROM A DATE SOME DISTANCE BACK.

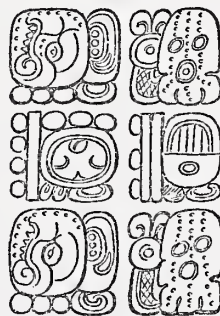


These signs occur only where the reckoning is from a date some distance back, and when it is neither the initial nor immediately preceding date. The numerical character of many of the directive signs already given cannot have escaped attention, but it is more apparent in these than in any of the others. At first look they might seem to indicate the number of removes of the specified date, or the number of intervening days; but as the three that are substantially the same point to dates of different removes and widely different intervals, the conjecture seems to fail.

## THE UNIVERSAL DIRECTIVE SIGN.



I have reserved this glyph for special mention. In one or another of its various forms it might have gone into each of the foregoing lists, for on different occasions it seems to perform the duties of all the other directive signs, but in such a peculiar way that I am not able to demonstrate its exact value positively in a single instance. Unlike them, however, it is never used alone. It is always accompanied by one or more glyphs, constituting its suite, and therein lies the secret of its elusiveness. I think it is generally, if not solely, employed in cases where a part or the whole of the period indicated is not notated in the ordinary manner. An example or two will sufficiently illustrate what I mean:



These six glyphs are the only ones between two dates which are just 13 ahaus, 3 chuens

and 9 days apart in the annual calendar, as shown in the usual way by two of the glyphs. But I suspect—for the matter is not susceptible of satisfactory demonstration—that the dates are here denoted to be much farther apart; in fact, that they are actually 5 katuns, 18 ahaus, 11 chuens and 9 days removed from each other. The difference is exactly two calendar rounds, and that fact I conceive to be expressed by the upper and lower pair of glyphs, in this way: Reckoning thence (from the preceding date) a calendar round, 13 ahaus, 3 chuens, 9 days, and reckoning thence an additional calendar round. The glyph that should represent the calendar round here is composed of two characters, the prefix denoting 20 and the mask-like symbol 949, according to my theory, which numbers multiplied together make 18,980, the days in a calendar round. It may appear strange that there should be a sign for so odd a number as 949, but that is one of the important numbers in Maya chronological reckonings, and it is likely that there are many signs for it. The repetition of the directive and calendar-round signs, instead of embodying the purport in a single expression, is something for others to explain. I know only that the style of the inscriptions is very redundant, as the next example also will show:



The reckoning here is from the beginning of a great cycle. A notation of  $1-6-7 \times 12$  (the 12 erroneously appears as 13) precedes the glyphs and is to be incorporated with them. That reckoning shows the difference between the dates in the annual calendar; but the real difference, I think, includes twenty calendar rounds in addition, the full notation being  $2-14-0-15 \times 12$ . The additional period I suspect to be expressed by the two middle glyphs—that to the right being a sign for the bissextiles, its prefix denoting 20 of them, and the one at the left in some way indicating 13, the number of bissextiles in a calendar round, making a total of 260. That is, instead of directly saying twenty calendar rounds or notating the period in the usual way, it is indicated by giving the number of bissextiles that would accrue in it. If my surmise be correct, the reading of this notation should be as follows:  $1-6-7 \times 12$ , reckoning from the beginning of the great cycle, and 13 20-bissextile periods—from the beginning of the great cycle. These interpretations are put forth more as suggestions than assertions. I do not wish them accepted on my authority, as there is more than a possibility of their being wrong, and I desire to avoid misleading any one. For myself, I have



hardly a doubt of their correctness, but the matter by its very nature evades proof. The examples given occur on the Tablet of the Cross, in a series of consecutive reckonings that run from the beginning of the great cycle to that of the 9th cycle. In addition to the computations notated in the ordinary way, an amount of time that can be designated in no way I can conceive except by the construction I have put upon the foregoing glyphs is required to fully cover the interval. If there were only these two kinds of reckoning to deal with, the matter could be easily determined. But there are three places where the notation is in still another style, as yet unintelligible to me. These exceptions, however, do not materially affect the point in question, for, after making reasonable allowance for them, the greater periods which I suppose to be expressed by the foregoing symbols remain necessary as ever to the calculation. Other unfamiliar characters are coupled with this same directive sign; but as I could only speak conjecturally of them, as of those already given, I will not pursue the subject further.

#### THE HAND AND SCORE SIGN.



Here is another directive sign whose different shades of meaning it is impossible to determine at present. Until we have a better knowledge of the numerals we can only assign to it generally the sense of "during," but with that knowledge it will be the surest guide of all. It is employed, I think, to show the number of scores of days from the beginning of a katun or cycle, as the case may be, to the date immediately in question. But, beyond this vague surmise, it will have to be left in abeyance for awhile, as so many things of whose significance we are uninformed must be taken into consideration in analyzing its values—the particular position of the hand; the presence of additional factors, as the stick in the last glyph; the single, double or triple nature of the score sign at the end of the finger; and the unfamiliar character of most of the numerals used in connection with it. It is of great service, however, even with the faint knowledge we have of it; for when we find it accompanying a symbol indicating a particular katun or cycle, we know, though unable to determine the exact point, that it is directing us to a date which occurs during that period.



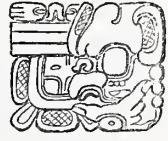
## DETERMINATIVE SIGNS.

I KNOW for a certainty of but few signs to which the term determinative, strictly construed in accordance with its use in connection with Egyptian hieroglyphic writing—that is, equivalent signs employed to denote in another way that which has already been expressed—can be applied; but I think that a more thorough knowledge of the glyphs will reveal this class to be quite numerous. The determinative feature is very strong in the Maya language, as stated in speaking of the numerals, and it is only reasonable to suppose that it was equally prominent in their graphic system. Throughout the inscriptions there are many characters that appear to be superfluous—I mean, glyphs that seem to be uselessly attached to series whose import is complete without them, and to which apparently they give no additional meaning. I suspect most of these characters to be determinative signs, merely repeating in another fashion what has just been stated, in order to avoid all possibility of misunderstanding. They may denote some distinction in quality, class or order, but, if so, I have failed to detect it in any case. I can discover in them nothing but equivalency and repetition.



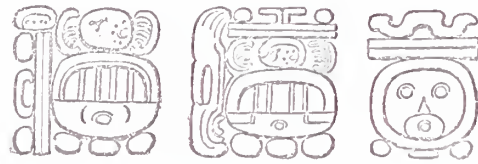
The two glyphs here given are equivalents. Each is a symbol for the 120-day period, or week round. The specific number of days is designated in both—in the first by the elliptical character for 10 and the double *ix* sign for 12 multiplied together, making 120; in the second, by the same process, only that 12 is there represented by an animal head. Both glyphs occur frequently in this single state, but occasionally—whether the writer thought the sign required elucidation, or whether the sculptor found more space at his disposal than the simple form of the symbol would becomingly fill—the *yaxkin* sign is appended to each of them. The sign for Yaxkin represents 120 days, according to the theory I have advanced of the numerical values of the month symbols. As there is no other conceivable purpose this sign can serve in the relation here shown, I believe it is merely used determinatively to repeat and emphasize the fact that the preceding characters signify 120 days.

This glyph occurs immediately after a date that is the beginning of a 10th ahau. The first character is the sign commonly employed, by itself, to denote that circumstance. It is a modification of the quadrated sign for 20 which forms its characteristic feature. There are many variants of it—in fact, I doubt if it ever occurs twice in the same shape; but, whatever the variation, it never fails to indicate a 10th ahau or an even 10-ahau reckoning. Being so common and apparently unmistakable, it does not seem at all necessary that its meaning should be repeated here, but for some reason it is, and by a sign less common and intelligible. The purpose may have been to familiarize the public with the rarer sign by using it as a determinative of the better known one in a position where it was impossible to mistake its significance—for they occur on a Tikal tablet, the only signs between a date and a reckoning, the context proving the two characters to be synonyms. But we are not left to infer the meaning of the determinative solely from that circumstance. In the table showing the series of ahaus and their equivalent signs, on Stela J, Copan, the 10th ahau is represented by this identical character; so there can be no question about its meaning, or about its being used as a determinative in this particular case.



## DECLARATIVE SIGNS.

THIS class of signs is very large. It includes not only most of the characters used at times directly or determinatively, but all of the period symbols become declarative by having a beginning sign affixed to them. Thus, the bouquet sign, when attached to Ahau to indicate it begins an ahau period, renders that day symbol a declarative; and, similarly, these glyphs are all declaratives, proclaiming alike the beginning of a



12th katun; for, though the last appears to denote the 10 Ahau to be simply the beginning of a katun, we know that during the cycle in which the date in question occurs no katun but the 12th begins with 10 Ahau.

But the signs commonly made use of for declarative purposes are different from those ordinarily employed to denote the same periods. The following are the ones most frequently used in connection with the katun:



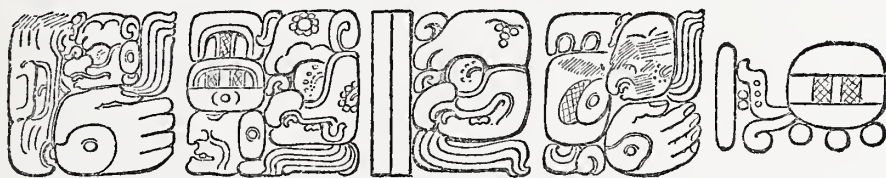
The first of these usually precedes a date, announcing it to be the beginning of a katun; the others follow after dates. The second glyph means, literally, the beginning of a 20th ahau; but as the beginning of a 20th ahau must always be the beginning of a katun also, the symbol when used declaratively becomes transformed from an ahau into a katun sign. I desire to call attention to the third glyph particularly. It is composed purely of numeric elements, with the exception of the beginning character. The main part is a sign for 18. The suffix is one of the characters for 20 raised to twenty times its value by partial striation of the curve representing 5. The two numbers multiplied constitute the number of days in a katun— $18 \times 400 = 7,200$ . In the last glyph the value of the suffixed sign for 20 is not increased, but the same

result is obtained by putting an additional sign for 20 at the side. To illustrate what I believe to be the principal upon which glyphs were developed, I give here a series of signs showing the growth of this one from the time it is simply  $18 \times 20 = 360$ —the equivalent of an ahau—till it reaches its perfect form as a concise katun symbol:



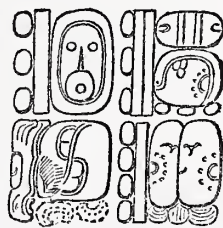
Here it is made manifest that the part of it representing 18 is composed of two signs for 9. In the first three glyphs the three small circles denote the 9 that in the others is expressed by cross-hatching. The other 9, represented by the peculiarly arranged lines underneath, is constant throughout all the symbols. All the affixes are signs for 20, except that in the last glyph, which, as I have said, is a 20 sign increased twentyfold by striation.

I have spoken of two declarative signs signifying that a date is the beginning of an ahau—the one accompanying the day Ahau, and the glyph consisting of two signs for 20, multiplied to make 400. They and the first of the subjoined list are the only ones I know that declare the beginning of an ahau in the abstract. Usually the specific number of the ahau is given, as shown in the rest of these signs:



The numerated symbols here denote respectively a 5th, 10th, 17th and 15th ahau. It will be observed that the beginning sign is not a constant attendant either here or in the preceding examples, the practice in many instances being to simply declare a date to be a 10th, 13th or 15th ahau, or a katun, as the case may be, without particularizing that it is the beginning of it.

The declaration is not always as direct or plain as in the foregoing examples. Sometimes a day sign is employed as an intermediary, as here shown. The reading here is: 8 Ahau—13 Ceh, the beginning day of the 9th cycle. The day plays a conspicuous part also in a curious instance of double declaratives. Unfortunately the inscriptions are so badly defaced in every place but one where the examples in question occur that it is difficult to get a good drawing, but the purport of the signs is nowhere doubtful. The subfix or sub-subfix—very variable, as though anything





unusual in that position would serve the purpose—to the day symbol in these cases is a declarative sign denoting it to be a repeated date. There is no repetition of the



month symbol in any instance, but a declarative sign follows instead showing the position of the date—as, in the first example above, that it is the beginning of a katun; or, in the second, that it is the beginning of an ahau.

Almost innumerably varying examples of declarative signs and their use—not only in connection with the ahau, katun and cycle, but with other periods—might be given; but as they would practically be a repetition of what has been stated, and as the examples already given will suffice for all ordinary purposes, I shall pass on to other matters.

## EXERCISES IN DECIPHERMENT.

It is but just that I should give the reader an insight into the processes by which my conclusions have been reached, thereby enabling him to judge of their correctness for himself. I have already gone pretty thoroughly into the considerations for constructing the calendars in the way I have, and incidentally have explained the reason for attaching to many characters and combinations the value I do. The range is too extensive for me to attempt to cover the entire ground, so I shall limit myself here to what will probably be to the general reader the most interesting part of the whole study—an exposition of the means by which the significance of particular glyphs is determined.

As everything is necessarily experimental at the start, we have to begin with mere assumption, or else there could be no beginning at all. Of course, these assumptions are not made at random. They are founded upon at least a reasonable degree of probability. But, no matter how certain the foundation may appear, we are not justified at first in regarding our ascriptions as anything but tentative. If the result meet expectation in a single trial of our surmise, it is fortunate; if in a second, there is cause to be hopeful; if in a third, the promise of confirmation becomes bright; but not until the value we have ascribed to any certain character is exactly and completely fulfilled in every situation in which the character occurs, can it be considered to have been removed from the realm of assumption to that of fact. Unfortunately there is not enough material to render the trial thoroughly satisfactory in all cases, so that the meaning of many glyphs must remain in the tentative stage until such time as we have ampler material for comparison. But that should not deter us from advancing to the utmost limit we may and holding the outposts boldly. It is likely that some of our conscripted recruits will scatter before the onset of inscriptions yet to come; but the calendars, the period symbols, and the great bulk of the rank and file, will stand like the Old Guard. I have no fear of the final outcome. With courage, patience, and perseverance we shall conquer every difficulty and subdue these defiant glyphs into a submissiveness to our understanding as complete as that of our own alphabet.

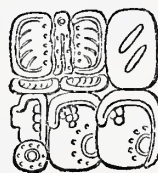
The struggle I had to obtain the meaning of the first few glyphs was a hard one, and the story of it would be more tedious than profitable or entertaining. But the knowledge of every additional character increased my vantage ground and rendered the next step easier, so that gradually I gained insight into things which seemed

impenetrable at the start. The two general lines upon which I have operated are the one where the reckonings and dates reveal unmistakably the value of signs, as the period symbols and face numerals, and that where characters can be brought to trial at the bar of periodicity. Other practices, of course, came in incidentally—in so hard a struggle no resource must be overlooked—but those were the principal ones. To find a place where I could corner a glyph in either of those ways was almost equivalent to making it stand and deliver its meaning to me. Hence, I have hunted with avidity for dates, reckonings, and periodical recurrences.

The richest treasure in this respect—the one which comes nearest to being the Rosetta stone of the Maya mystery—is the inscription on the north and south faces of Stela J, at Copan. Maudslay divined its importance, and gives an extra plate of it with the glyphs separated so as to accord with the respective ahaus. It is reproduced here. The purpose of the inscription is so manifestly to give a table of the ahaus with computations of the days respectively embraced in them, a number of certain other time measures according with different ones, and in many instances equivalent signs for the period denoted, that nothing is wanting but the time and patience to unravel its details. But there is almost as much ill as good fortune about this tablet. Its space did not allow a complete series of the ahaus to be given; the last two glyphs are hopelessly obliterated, while others are injured beyond sure recognition; and the whole first part of it is so defaced that nice distinctions, especially in the numeral characters, cannot be made out with anything like certainty. But, such as it is, we will go through it serially. As in print we cannot come back to apply subsequently obtained information, in speaking of the earlier characters I shall have to anticipate a few things that properly should be spoken of only later on. We start with the assumption that every glyph following a particular ahan represents it or its value in another way. The fact that there is no 20th ahau—which, so far as the symbol that numeral is attached to is concerned, means no ahau at all—shows that one full ahau, or 360 days, is considered to have passed when the table begins.

#### FIRST AHAY.—360 DAYS.

*2nd glyph.*—The upper character is one meaning beginning, or from the beginning, as we have learned from its use elsewhere with directive and period signs, so there will be no necessity for speaking of it again. The inference is plain that the characters under it represent the number of days in the single ahau that has passed. They consist of a composite sign surmounting two opposed coils—the coil, however, not being as plain in this particular instance as in succeeding ones. We have long suspected all forms of the coil, where it went beyond a mere curve, to be indicative of 9, and the suffix of the ahau symbol has pretty well satisfied us of it. Now, these are identical with the coils in that suffix, but they have not the centerpiece between them





which there multiplies them by 4. Hence, these must stand for 18 simply, one of the commonest constituents of 360, the ahau number of days. In that case the other factor must be 20, represented by the composite character above.

*3rd glyph.*—Here we recognize the double *cauac* character, which we know stands for 20 days, from its employment in the symbols for the calendar round and cycle. It follows that the head above it must imply 18, but unfortunately it is too mutilated to clearly make out if it has the characteristics of the ordinary 18 face or is a variant.

#### SECOND AHAU.—720 DAYS.

*2nd glyph.*—The same two coils; hence the composite character above them here must denote 40.

*3rd glyph.*—The 10-day sign qualified by three characters that should aggregate 72. We should not be able to make them out but for knowledge subsequently gained. If you will look down to the 7th ahau you will see, in the second glyph, the under one of these three characters. Its position there proves it to be 35. The middle numeral is a bar with a band crossing it obliquely in the center—a sign for 9; but here there are two other partial bands, so that presumably it is three times nine, or 27. We are yet ten short of the necessary total. In the top sign, we know the *ahau* stands for 4, the hand ordinarily for 5; but as the upright thumb by itself means 1, the hand in this position evidently has the value of 6.

#### THIRD AHAU.—1080 DAYS.

*2nd glyph.*—One of the coils disappears here and a sign for 3 takes its place. As the 9 element, which is an indispensable constituent of the ahau total, would be lost by addition, this 3 must serve as a multiplier— $9 \times 3 = 27 \times 20 = 540 \times 2 = 1080$ . The multiplication also shows us that the duplicate character at the bottom has here but a single value.

*3rd glyph.*—The *yax* character which in the month symbol has the value of 4, an outflaring sign which in another inscription distinguishes a 15th katun, and a character that must signify 18, to make up the complement of days— $15 \times 4 = 60 \times 18 = 1080$ .

*4th glyph.*—We must infer this to be an arbitrary sign, equivalent to a 3rd ahau, or three ahaus.

#### FOURTH AHAU.—1440 DAYS.

It will be observed that the reckoning of the days is missing here—a fact that will become important when we reach the next ahau.

*2nd glyph.*—As a portion of this is obliterated, we will pass it by. It is a waste of time to study illegible glyphs when the missing part is not restorable from what is left or from the context.

*3rd glyph.*—Same remarks.

## FIFTH AHAU.—1800 DAYS.

*2nd glyph.*— $18 \times 40 = 720 \times 2 = 1440$ ; hence this glyph should have gone with the preceding ahau.

*3rd glyph.*—A symbol which appropriately denotes the beginning of a 5th ahau in several other places in the inscriptions. I call attention to the peculiar character of the wing, or whatever it may be termed. It is not the ordinary form, signifying 20, but must have the value of 36— $10 \times 5 = 50 \times 36 = 1800$ .

## SIXTH AHAU.—2160 DAYS.

*2nd glyph.*—The under number being 4 here, the character above the coils should represent 30, but instead it represents only 25— $18 \times 25 = 450 \times 4 = 1800$ ; hence this glyph should have gone with the 5th ahau.

*3rd glyph.*—The 20-day sign again, qualified by a character which the connection requires to be a sign for 108— $108 \times 20 = 2160$ .

*4th glyph.*—An arbitrary sign, probably, for six ahaus or a 6th ahau.

## SEVENTH AHAU.—2520 DAYS.

*2nd glyph.*— $18 \times 4 = 72 \times 35 = 2520$ .

*3rd glyph.*—Two of the characters encountered above reappear here, associated with a knot, which we know to be a sign for 5 or some of its multiples. As neither 10, 15, nor 20, added to the other characters, would form a number that would be an even divisor of 2520, we must consider this a sign for 5, and the character underneath it to represent 60— $10 + 27 + 5 = 42 \times 60 = 2520$ . The subfix here, consequently, notwithstanding its resemblance to the character representing 72, can have no value, but must serve merely as a pedestal, as it does under the day symbols.

## EIGHTH AHAU.—2880 DAYS.

*2nd glyph.*— $18 \times 40 = 720 \times 4 = 2880$ .

*3rd glyph.*— $18 \times 40 = 720 \times 4 = 2880$ . The subfix is without value here also.

*4th glyph.*—Too defaced to justify any estimate of it.

## NINTH AHAU.—3240 DAYS.

The computation, if there was one, and the equivalents are defaced beyond the possibility of recognition.

## TENTH AHAU.—3300 DAYS.

The ahau sign here differs from all the rest. It is the symbol used in a Tikal tablet to denote a date to be a 10th ahau.

*2nd glyph.*—The two coils do not appear here, only one, but that one is qualified by a curve, signifying 5. As it cannot be added without destroying the 9 element, it must serve as a multiplier— $9 \times 5 = 45 \times 40 = 1800 \times 2 = 3600$ . The 2 sign here looks something like the *ahau* character for 4, but the context requires it to be 2.

*3rd glyph.*—The symbol that everywhere denotes a 10th *ahau* or an even 10-*ahau* reckoning, with the character that commonly constitutes its center placed beside it. As these 10-*ahau* symbols are often useful in determining the location of dates and the length of reckonings, I give here another of them, which is used interchangeably or in association with the foregoing.



#### ELEVENTH AHAU.—3960 DAYS.

*2nd glyph.*—The stone is so badly mutilated that this glyph cannot be restored with certainty. If the characters that are tolerably preserved be 5, 9, and 2, the other should be 44, but I distrust their identity.

*3rd glyph.*—There may be two glyphs here, though I think not. The 20-day period being the factor to be raised, it requires 198 for a multiplier to bring it to the necessary total. The character to the left of it being one there is good reason for supposing to represent 73, and the right-hand sign at the top being 18, it follows that there can be no multiplication of these numerals but that they must be added; hence the remaining characters must aggregate 107. The comb sign—though duplicated here, as in many other places, to give it a more ornamental effect—probably represents but 20. That leaves 87 to be accounted for by the remaining character. It is a sign that occurs many times, but its central part is seldom twice alike, sometimes being a single bar, sometimes two, and again something quite different. Here it has the appearance of the spire in the *akbal* sign, which stands for 7. On either side is a comb sign for 20, raised to twice that value by a line of dots. It is possible, therefore, that the two together may represent 80, the particular center part in this instance raising the full value of the character to 87.

#### TWELFTH AHAU.—4320 DAYS.

*2nd glyph.*—At first view the principal factors appear to be identical with the characters representing 108 and 18. But the ball in the center of the first is double, and there is cross-hatching on both, which may modify the meaning. The character at the bottom seems to be only a beginning sign, though its form is somewhat unusual. If the right-hand sign be 18 and the suffix nothing, the other character must represent 240; but there is too much uncertainty involved to warrant confidence in this deduction.

*3rd glyph.*—Here again we are nonplussed. We know the bouquet sign for 6 (the same as that over the symbol for *Zac*) and the *ymix* character for 5; but the latter has

a peculiar marking at the top, and we do not know how that may alter its value. The character over it may be a multiple of 20, as it has the general appearance of the wing sign for that number, with a qualifying mark at the left part of it. For a reason that will be made evident later on, we will assume that it represents 120, and the *ymix* character  $6-120 \times 6 = 720 \times 6 = 4320$ .

## THIRTEENTH AHAU.—4680 DAYS.

*2nd glyph.*—Here the signs for 9, 5 and 4 are plain, indicating that the other character must be  $26-9 \times 5 = 45 \times 4 = 180 \times 26 = 4680$ .

*3rd glyph.*—The chief factor here is a 260-day sign which we encounter elsewhere. It consists of the *ahau* sign, doubled in value by the surrounding row of dots and enclosed in the *ymix* character for  $5-4 \times 2 = 8+5 = 13$ —and then multiplied by 20, denoted by the duplicate comb sign below— $13 \times 20 = 260$ . There are just eighteen of these periods in 13 ahaus; hence the character to the right must represent 18.

*4th glyph.*—A beginning sign before a glyph that must necessarily be a symbol for a 13th ahau or thirteen ahaus.

## FOURTEENTH AHAU.—5040 DAYS.

*2nd glyph.*—There is doubt if this was intended for a single glyph, or if two glyphs were artfully or accidentally mixed up. The characters, moreover, being so nearly illegible that there is no certainty about them, it would be useless to attempt a solution of the puzzle.

*3rd glyph.*—A head that appears to be a compound of the chuen and ahau heads. As it probably represents an ahau, the sign in front of it must stand for 14.

## FIFTEENTH AHAU.—5400 DAYS.

*2nd glyph.*—The 9, 5 and 4 signs are plain here; the other character, therefore, must be 30.

*3rd glyph.*—The 5-ahau character, qualified by a sign that must represent 3—the whole being a symbol for a 15th ahau, or fifteen ahaus.

## SIXTEENTH AHAU.—5760 DAYS.

*2nd glyph.*—A different character qualifies the coil here. It must stand for  $4-9 \times 4 = 36 \times 4 = 144 \times 40 = 5760$ .

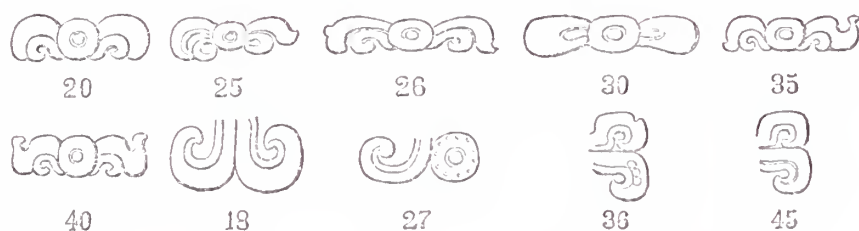
*3rd glyph.*—The same form of the *ymix* character encountered at the 12th ahau is again the central figure, but here it has a 20 sign under it, which presumably raises it to 120. If so, it requires to be multiplied by 48 to make up the total number of days. The signs for 18 and 10 leave 20 to be supplied by the other character, which is the



skeleton jaw, an invariable sign for 10, here doubled in value by the row of dots in the upper part.

The manner of piecing out the numerals in some of the above instances has been too forced for the result to be regarded as altogether trustworthy; there are also several inconsistencies or errors; but, take it all in all, the number of occurrences in perfect accord with our assumption is too great to be attributable to accident, and we are therefore justified in believing our theory to be correct, however we may have erred in particular applications of it. We have gained a great deal more than is apparent at a first glance. Not only have a considerable number of equivalents for different ahaus and symbols for minor time periods been identified and the value of many new numeral signs established, but—more important than all this—we have satisfied ourselves that there is a plan underlying the employment of a portion of these signs which is capable of almost unlimited variation and extension. It can be best shown by a simple list of the composite numerals and their elements.

#### COMPOSITE NUMERALS.



#### *Elements of which they are composed.*



This exhibit requires no explanation; it is self-explanatory. I will only direct attention to the possible fact that in the reverse curve, one of the signs for 10, is the original wing, which by different styles of striation and dotting becomes a symbol for higher numbers.

I shall next give two extracts from the second tablet in the Temple of Inscriptions. They are not reckonings between specific dates, but simply exercises showing different ways of scanning time and notating periods. They illustrate one of the three purposes I attribute to the inscriptions—the educational one. If the tablets were mere shrines or chronological records, there would have been no necessity for repeating the same time-measure over and over, consecutively, with no other apparent object than to show that it could be expressed in a variety of ways. But repetition, being the plainest and

easiest way in which the variations could be taught, would naturally be resorted to as an educational means; therefore, that which appears to us mere tautology or redundancy was probably a skilful design for familiarizing the Maya youth with the elaborate code of chronological symbols. These glyphs are to be read in lines across the page. The entire nineteen occur in consecutive order, as here given:—



We are familiar with three glyphs in each line—the first, fifth and sixth, numerating them by the full line. The first is a katun symbol; the fifth, the 108-day sign multiplied by a 400 subfix— $108 \times 400 = 43,200$ —equivalent to six katuns; the sixth, a symbol for the cycle. It will be observed that all the first, fourth and sixth glyphs have beginning signs, while all the rest are without them. The purpose, therefore, appears to be to reckon from a beginning katun, by two stages, to the beginning of a cycle. Counting back six katuns from the beginning of a cycle, brings us to the beginning of the 14th cycle; thence backwards thirteen katuns, to the beginning of the 1st katun—not the 20th. Hence, this formula must read:—“From the beginning katun . . . 13 katuns . . . to the beginning of the 14th katun . . . 1  $108 \times 400$  (or 6 katuns) . . . to the beginning of the cycle.” The second glyph in the first line, with slight modifications, appears above the images on several stelæ, and forms the base of the cross on the celebrated tablet at Palenque. It is the symbol representing thirteen katuns, in my construction of the formula. The importance of the 13-katun count in the Maya chronological scheme sufficiently explains, to my mind, the prominence of this sign among the sacred symbols. But I desire to point out where I think the teacher got in his work. The children must have been pretty familiar with this particular 13-katun symbol, for it had been conspicuously before their eyes ever since they had been old enough to attend worship, and they may have said their prayers to it many a time; but probably it was the only symbol for that period they knew of.

So at the proper age they were taken to another temple—a sort of high school, as it were—and shown this sign incorporated into an instructive formula, and then were shown the same formula right over and over again, with equivalent signs substituted for this and some of the others, but retaining its general character so as to impress them in a way they would never forget it. It would not be a bad method of teaching even now. If there were any reason to doubt the character being a sign for thirteen katuns, the two substitutes in the line below would remove it. There not only is the number of katuns designated by the trinal sign for 13 which is used with the great cycle symbol in initial dates, but, for fear the variant katun sign may not be intelligible enough, the ordinary katun head is placed after it as a determinative. Unfortunately the variant in the last line is too badly damaged to be made out distinctly. What the last glyph in all three lines means I do not know, but I suspect them to be variant cycle symbols used determinatively. The middle one is common, and seems always to relate in some way to the beginning of a cycle. The next example I shall give occurs on the same tablet, a short distance from the foregoing one. Some exercises in minor time-periods are gone over, and then the cycle is reverted to, but this time two cycles are dealt with instead of one.

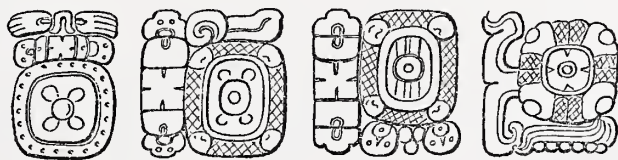


There are many new characters here, and there is more variety in the substitution ;



but as the reader is by this time familiar with the principal symbols and the method of scanning the lines, I shall not pause to point out the different variants, but simply give my idea of the reading. I think the sense of the three passages is identical, and believe it to be this:—"The beginning katun . . . . commencing a double cycle computation . . . . 1  $108 \times 400$  (or 6 katuns) . . . . to the beginning of a 7th katun . . . . 10 katuns . . . . to the beginning of the 17th . . . . 4 katuns, to the beginning of the 1st katun . . . . 13 katuns, in the second reckoning . . . . to the beginning of the 14th katun . . . . to the beginning of the cycle." It was not deemed necessary this time to explain the 13-katun symbol in the fourth line by the use of a determinative, the pupils being thought to have become sufficiently acquainted with it from the preceding exercise probably. I shall not attempt to analyze the various symbols. The elements of some of them are yet beyond my reach. That they are all combinations of signs for numerals and time periods is self-evident. For the present we must accept them simply for what they stand here. But in the eventual analysis of these and other known texts, and the gain we shall thereby make in our knowledge of particular characters, lies the only way by which we shall be able to penetrate into the secret of glyphs as yet absolutely unknown.

The examples thus far have all been of a similar character. They are what I regard as lessons, designed for the instruction of students in variants and equivalents and the different ways of computing and scanning. I shall now give an example that has a wider range. It is from the third tablet of the same temple, and is a fair average specimen of the inscriptions in general. I select this particular example because it has more variety than could be found in most extracts of equal length, and because it goes far toward substantiating my contention respecting the bissextile sign. It is an exercise also, but of a different kind, and it possesses the additional value of being a record of specific dates, with reckonings to correspond. Before giving it, however, I wish to call attention to a glyph that will figure in it quite prominently—this:—



The glyph is of frequent occurrence. I believe it to be—or to have been originally—a day symbol, and I give the four examples above in order to show the variety of characters by which 20 and 13, constituting the 260-day number in this case, can be expressed. But if the glyph means, or ever meant, a day, it is not employed in the inscriptions in the same sense as are the other day symbols. Wherever the context is determinable it will be found that the sign never occurs except when the reckoning is



backwards. Hence I consider it safe to ascribe that significance to it—indicating a backward count—though for lack of certainty I did not include it among the directive signs.

The extract begins at a point where the reckoning in the inscription, after having run consecutively from the 4th to the 13th katun of the 9th cycle and then leaped ahead to the beginning of the 10th cycle, abruptly breaks off. It is as follows:—



The reading of the above, so far as I can make it out, is as follows:—[To the] 10 Ahau . . . . 13 Yaxkin . . . . [that is] 1 calendar round . . . . [from a, or the same] date appearing some distance back.—8 days, 9 chuens [there is what appears almost like a trick here: the number of chuens is not designated by three dots, but by three signs for 3] . . . . [and] 12 ahaus . . . . reckoning backwards, [by] katuns [probably a manner of denoting the reckoning to be a long one] . . . . [to] 8 Ahau . . . . 13 Pop . . . . [1040] bissextile periods [in addition. It is impossible, with our imperfect knowledge of the Maya numerals, to say just how this number of bissextile periods is expressed; but a subsequent reckoning shows that 80 calendar rounds, or 1040 4-year periods, are implied here.] . . . .

reckoning backwards . . . . [an unintelligible glyph; though, as it is very like some we have just seen employed in scanning the katuns, it probably has the same significance as the katun sign previously made use of to indicate a long reckoning] . . . . [to the] 5 Lamat . . . . 1 Mol . . . . [that is] 8 days, 4 chuens . . . . [and] 2 ahaus . . . . [from the] 3 Ahau, beginning a katun . . . . 3 Zotz . . . . a 20th ahau [or beginning of a katun].—1 day, 12 chuens . . . . 1 ahau . . . . 9 katuns . . . . [and] 2 cycles . . . . [the count covering] 18 calendar rounds . . . . [from, or to—for it is uncertain if the reckoning is intended to fix the position of the date 5 Lamat–1 Mol more circumstantially, or is a separate reckoning back from it] the 10th score [or 5th double score] of days, [in the] 7th cycle . . . . [and] 7 days . . . . [from the] 20th [or beginning score] . . . . 1 Manik . . . . 10 Tzec [There is a mistake somewhere, as the date at that point is 9 Manik–20 Zotz] . . . . the beginning of a 7th day [or 7-day period].—Reckoning backwards, [by] katuns . . . . [an unintelligible glyph, though it probably indicates a period of some kind] . . . . 8 days, 5 chuens . . . . 10 ahaus . . . . 11 katuns . . . . [and] 10 cycles . . . . [to] a date appearing some distance back [8 Ahau–13 Pop: the reckoning here is an exact repetition, though in a different style, of the first of the preceding ones] . . . . [from the] 5 Lamat . . . . 1 Mol . . . . [that is] 1 calendar round . . . . [and] 8 days . . . . [an unintelligible glyph] . . . . [from the] 10 Ahau . . . . 13 Yaxkin . . . . appearing some distance back.—5 Lamat–1 Mol . . . . 4 Manik . . . . 10 Zip [I have no notion what these two isolated dates can mean, unless the former is a mere redundant repetition of the date from which all the reckonings have been made; but the latter has no apparent relation to anything else in the text].—1 cycle . . . . 9 katuns . . . . [and] 16 ahaus . . . . [an unintelligible directive sign; the reckoning, however, is from 10 Ahau–13 Yaxkin, beginning the 4th ahau of the 10th katun of the 10th cycle—showing an abrupt and unaccountable leap forward] . . . . [to the] 20th [or beginning] score days . . . . beginning the 12th cycle.

It will be seen that the 5 Lamat–1 Mol whose exact position in the chronological calendar is 54—9—9—2—4×8, is the central point of the three principal reckonings in the foregoing extract. That date is also indicated by other reckonings in the preceding parts of the same inscription. Why it should have been given such prominence, it is at present impossible to say. It could not have been the beginning of any period of the annual or chronological scheme, nor of any other time arrangement of which we have a knowledge. The secret of its importance is as impenetrable as that of 8 Oc–3 Kayab, which occurs so frequently in other Palenque tablets. Were memorable events expected to occur at these dates? Did they mark notable astronomical conjunctions? If so, there is nothing in the context to indicate it—there is nothing, in fact, but the same eternal reckoning backward and forward, with no other apparent purpose than just reckoning for the sake of reckoning. The most interesting

thing about this extract to me is that it practically establishes my theory of the bissextile sign and one of its uses. The two reckonings from 5 Lamat-1 Mol to 8 Ahau-13 Pop cover the same interval—fully notated, in the ordinary way, in the second instance: 10—11—10—5×8. In the first instance only 12—9×8 of this period is notated in the usual manner, leaving 10—10—17—14×0 to be accounted for by the bissextile glyph and the one preceding it. This reckoning is the equivalent of 1,518,400 days, or exactly 80 calendar rounds. It is not expressed here in days, years, or calendar rounds, however, but by bissextile periods of four years each, of which 1040 are required to make up the count. That I am unable yet to construe the figures into that number does not shake my faith or induce me to ascribe an unwarranted value to any of them. I have learned to be patient, and can wait; the knowledge will surely come.

I have expressed my conviction that a year and day count runs collaterally with the ahau reckoning in most instances, and that frequently the computation is carried on by that means alone, confessing at the same time my inability to discover the plan on which it is conducted. I shall give some examples here that may possibly be reckonings of that character:—

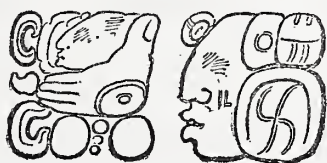


These two glyphs are found quite frequently together. I take them to be a formula denoting 64 days, as in one instance they occur where that number of days is indicated in the ordinary manner likewise. They are an equivalent, I think, of this other formula:—



This I believe to be simply: 17 days, 14 days, 16 days, 17 days—that is, 64 days. Why this number of days should have any special significance, or why it should be expressed in so absurd a manner as in the latter instance, I cannot say. Neither can I tell why our own adopted prophet uses such an expression as “times, times and a half,” nor what he means by it. When it comes to the language of prophecy and divination, uninspired folks may as well throw up the sponge. The Mayas may have been trying their hand at one or the other here—though I hate to think it.





These glyphs precede a reckoning of 537 days, in the usual way. The last is identical, or apparently so, with a glyph that represents 17 days in a number of places. It is probable, therefore, that the other may be a sign for a 520-day period. There seems to be no limit to the number of different day periods they had.



The glyphs here shown occur between two dates that are 16 years and 1 day apart, with nothing else intervening that appears to indicate the interval in the remotest way. I take the last glyph to be a 4-year sign, the numeral in front of it showing a total of 16 years—the extra day being expressed by the first glyph.



These characters occur where I think a period of 48 years and 480 days is required to be accounted for. It will be observed that in the first glyph the face sign for 3 is substituted for the head in the supposed 4-year sign above. I believe the period here indicated to be a 12-year one, which, multiplied by the 4 in front of it, disposes of the even 4-year count or 48 years. The second glyph is the 120-day sign with a determinative, and, multiplied by 4, represents the 480 extra days.

The claim of the foregoing symbols to the values I have respectively assigned to them can in no case be regarded as fully proved yet, but a very high degree of probability attaches to some of them at least. I could give many more examples of a similar character, but as all of them would necessarily be involved in the same uncertainty, it is not worth while.

In closing this section I wish to direct attention to what is the most exasperating, if not most perplexing, feature in all the inscriptions. The reason why most of the symbols that still baffle us continue to do so is that they do not occur often enough or in proper positions to afford a thorough trial of their meaning. But here is a series of glyphs repeated at least twenty times in as favorable a situation as could be desired,



and yet its significance defies our understanding. It follows immediately after most of the initial dates, sometimes the whole date preceding, and again the month symbol coming after it. Six is the least number of glyphs ever found in it, but I think that is the normal number, any excess being either extraneous matter or numerals separated from the characters to which they belong. There is considerable variation in the respective glyphs in different inscriptions, but the period type remains constant, in my judgment—the substitutes in all cases being equivalents, the only real difference existing in the numerals qualifying them. As good a single specimen as any is this, from Palenque:—



We know the value of a number of these signs. The first is not recognizable here, but the substitutes in other places are unmistakable symbols for a day; but the qualifying numerals are what puzzle, just as in this case. The next character is the one employed so universally as a directive sign, but here it must stand for either a number or a period, as most of its equivalents consist of a hand and the 18-day character. If this replaces the 18-day part of its variants, the 10 sign underneath it would indicate it to be altogether a symbol for 180 days, and the 10 in front would denote a value here of 1800 days, or exactly 5 ahaus. All the glyphs in this position have a beginning sign attached to them; so, it would appear, the days designated by the first symbol reckon up to this period, whatever it may be. The third and fourth glyphs are beyond our reach at present, though we can recognize enough in them to know that they indicate greater numbers than the preceding ones. The fifth glyph has a beginning sign in all cases, hence the two we have just passed by must carry a reckoning to it. It is the 120-day sign multiplied by 9, making 1080 days—or just 3 ahaus. The last glyph is the 108-day sign multiplied by 10, making just the same period—1080 days, or 3 ahaus. Is this last sign merely a determinative of the other, or does it supply the 1080 days to the beginning of which the reckoning was brought? But these are simple questions in view of the broader one—what does the series mean altogether? It is evident enough that its purpose is to fix the position of the date it accompanies relatively to some other method or methods employed by the Mayas to compute time. But what method, and in what way? I cannot master it, and therefore have dragged it forth to expose it to the concentrated attack of aspiring students.

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## A REVIEW OF THE INSCRIPTIONS.

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I HAVE arrived at the stage where a consideration of some of the inscriptions themselves comes properly in order. As yet I am not master of enough glyphs to fully make out the meaning of a single tablet; but I can decipher some of them sufficiently, I think, to justify the conclusion that no room remains for the record of any historical event. I was very reluctant to accept that belief, for I had entertained a hope that with the decipherment of the glyphs would come a flood of light, revealing all the mysteries of the Maya civilization. But every advance I made in reading the inscriptions tended to dissipate that hope, until I was at length unwillingly forced to the conclusion that, primarily, the inscriptions were intended to serve the purpose of calendars for the use of the whole populace; secondarily, that they were in part text-books designed to assist teachers in the initiation of their pupils into the science of mathematics and chronology; and, thirdly, that they were either objects of veneration or always made accessory to such objects.

Such formal and unzealous adoration as we can conceive possible to be given to abstract numbers or the multiplication-table was undoubtedly paid to them. We see everywhere priests and their acolytes making offerings to objects constructed purely of numerals. The inference is plain; the knowledge of numbers had wrought such marvels for them that in the absence of anything more marvelous they deified numerals and worshiped them. But these adoratorios were also school-houses and colleges, and the text of the worshiper became the text-book of the student. In different inscriptions is to be found the entire chronological curriculum; so they are not unlike Hamlet's players, being abstracts and brief chronicles of time. It is not unlikely that there were peripatetic schools in these Archaic cities, as in Athens. I can picture to myself the venerable teachers ranging their pupils in front of these inscriptions and lecturing them upon the principles and practice of chronology. But far above and beyond their use for purposes of worship or tuition was their service to the people in the capacity of public calendars.

It may appear absurd, at a first thought, that temples, monuments, and altars should be covered with elaborately carved inscriptions that record nothing but dates and other forms of time reckoning. But a little reflection should convince one that such inscriptions, under certain conditions, would not be preposterous, but the wisest and most useful of records. A calendar is an indispensable requisite of civilization. In fact, the existence or non-existence of a chronological system is the distinction between the

two broad states of mankind. The very attempt to construct one is the first step toward evolution from savagery, and a completed calendar of any kind is proof that the transition has been accomplished. In the savage state, where there are no business obligations to be punctually discharged, no civic or religious ceremonies to be observed at fixed times, no fiscal regulations, no registers, no history—nothing, in short, requiring perfect accuracy of date—there is no necessity for more comprehensive or intricate divisions of time than the natural system of new moons and seasons. But the affairs of men will not forever conform themselves to the returns of the seasons or the changes of the moon. With increasing intelligence there will arise occasion for marking sub- or super-annual and inter-lunar dates, and of this necessity will in time be born an artificial method of measuring time, more exact and systematic than the natural one. The mere existence of such a method implies civilization.

It would not be rash to assert that chronology enters more generally and extensively into the lives and affairs of a people than any other single factor of their civilization. Their actions are regulated by it throughout the whole range of economies—domestic, industrial, social, religious, and political. Deprive the world of the hour-glass, sundial, clock and chronometer, the common and nautical almanac, the counting-house, chronological and church calendars, and there would quickly ensue a confusion that would totally disorganize home life, labor, society, business, religion and government, if it did not destroy civilization itself; for such a deprivation would be the loss of the principal means by which mankind have worked their way up from savagery.

Bearing in mind this conception of the vital importance of the calendar to a civilized state, ought it excite our wonder that a people who probably realized that importance more vividly than we, should have utilized temple and stela and altar to furnish the public necessary chronological data and perpetuate a discovery so laboriously achieved? On the contrary, considering all the conditions, I think we should regard it as the most sensible and beneficent thing the rulers could have done. The result proves the wisdom of their course, for without these inscriptions all knowledge of their calendar would practically be lost, while the least reflection will reveal the utility of it. The art of printing in any of its forms was unknown, and with their elaborate graphic system books must have been of a cost precluding their purchase except by the very wealthy—if indeed their possession was not forbidden to all but rulers and priests. Hence, probably, there were few or no citizens outside the rich and privileged classes who had almanacs or chronologies of their own. Yet the necessity for them was, to a degree, the same as with us to-day. Housewives, husbandmen, merchants, travelers, money-lenders, tax-gathers, priests, devotees, students, statesman, magistrates—every one from the veriest peon to the supreme ruler—had each a special and all a general interest in knowing the current day, month and year, when some certain other day would occur or had occurred, what ahaus, katuns, or cycles had passed since some specified event, or must pass before some stated conjuncture—and the thousand and



one other problems involving accurate time measurement. For their daily use they had the art of dialing and of divining the hour from the position of the stars. Beyond this they must have been dependent for time reckoning upon mental processes, except for information derived from sources apart from any in their possession. It was to supply this general need, probably, that the public structures were made a universal calendar—not only for current use but as an enduring record that should be serviceable for all time. If any one desired to know the month and year, or the *ahau*, *katun*, cycle and great cycle, in which a specific day fell—whether near or remote—he had only to go to the proper temple or stela and there was the information before him, or the data from which it could be readily reckoned. These inscriptions were public libraries, as it were, more necessary and serviceable than ours from the lack of private works of reference. That they contained nothing historical did not detract from their usefulness. Chronology is a necessity; history is not. The Maya authorities contented themselves with supplying that which was necessary to the public, leaving historical luxuries to be obtained in some other way.

The inscriptions range from a single date to reckonings extending over thousands of years. Those of Palenque are the most comprehensive. The Copan and Quirigua reckonings seldom cover more than a few score years. It is evident that new monuments were constantly being erected. Some of them begin with the very date reckoned forward to in a former inscription. This fact suggests the thought that if all the monuments had been preserved to us we should discover that they constituted a complete series, each taking the concluding date of its precursor and reckoning forward to a date to be taken up by the next.

This theory of the public purpose and use of the inscriptions necessitates the purveyance of an annual calendar also in order to fully meet popular requirement. That nothing of the sort has been found among the inscriptions does not, in my judgment, affect the soundness of the theory in the least. With their graphic system it would take upwards of sixty-five thousand characters to construct a complete annual calendar—a number which it would have been impracticable for them to carve on any monument or tablet. It is therefore probable that the annual calendar was in book form, and was kept in some place accessible to the public; or, more likely, several of them were kept in different places.

Another consideration may be advanced in explanation of this childlike scrawling of an identical theme on every available surface. The Mayas, notwithstanding the degree of culture they had attained, were a primitive, and, consequently, single-ideaed race. They were in the childhood of civilization. The calendar, in all its wonderful intricacy and completeness, was probably their crowning work in the direction of applied science; and, with the iterative instinct of childhood, they indulged in endless exhibition of their proudest achievement. It may be denied that such puerility can attach to an adult state, individual or national. I beg to differ from that conclusion.



It was my fortune once to make a voyage with a veteran American man-of-warsman. He had been retired at the age of eighty-four, from a foreign station, and was going home to see his mother. These facts alone should be sufficient to prove that he belonged to the patriarchal strain whose contented and uneventful lives lap over the confines of centuries—a transient type in the childhood of all nations, a permanent one in nations whose whole existence is only a protracted childhood. But if further proof were needed, it would be supplied by the additional facts that he had just acquired an elementary knowledge of arithmetic, and sat all day long doing sums on a little slate. His most gorgeous flights scarcely went beyond an exercise in two figures; but the exultation he exhibited at the results could not have been exceeded by that experienced by Newton when he succeeded in calculating the laws of gravitation. In that ancient mariner I behold the Maya race. The same simplicity of purpose, the same innocence of higher culture, the same childish delight in practicing the single accomplishment they had acquired, impelled them to work over and over the problems of their chronology, as he worked over the simple sums of his arithmetic.

But it may be insisted that the erection of these monuments and the carving of their inscriptions involved some purpose apart from worship, education, catering to the general need or the indulgence of childish proclivities. Certainly there was another purpose, but the pursuit of it terminates in the same conclusion. Life was not all play or idleness with them more than with us. Then as now the great stream of humanity had its multifarious phases, and flowed on in myriad-motived currents. But the only feature of it left for us to consider is the relation existing between the potentates and the people. From our knowledge of the state of affairs at the time of the conquest, pieced out by history and tradition, we may be pretty confident that the form of government covering the range of the inscriptions was pontifical. Pope and king were one. All temporal and sacerdotal decrees were the offspring of his individual will—or, more likely, of many wills, but obtaining validity only through his utterance. The implied compact between sovereign and subject has never changed—is unalterable. It is conditioned that there must be benefaction on the one part precedent to any obligation of loyalty on the other. In these later days subject peoples drag on uncomplainingly without receiving the nominated dole, but the Mayas, I fancy, were more tenacious of their rights, and demanded the stipulated benefactions regularly—or, at least, on every occasion of royal rejoicing; and it seems to have been understood that these largesses should be in the form of new chronological inscriptions. So it may have come to pass that when a new pontiff was crowned, or an heir was born, or a victory was gained, or any other event of signal importance occurred, the ruler fulfilled his part of the compact by erecting a new temple, stela or altar and giving the people a fresh installment of their beloved calendar; and we see that the pressure of public sentiment in the 9th cycle of the 54th great cycle forced the rulers to be very lively about their work.

## THE QUIRIGUA INSCRIPTIONS.

I HAVE only six photographs of Quirigua stelæ, and four of these are so faint that the glyphs are almost illegible. I shall speak of them first, however, as two of them furnish conclusive proof of the mistakes that everywhere abound in the inscriptions. These errors were terrible stumbling-blocks to me at the start, for I did not feel confidence enough in my knowledge to assume them to be errors. But when I had repeatedly found dates belying each other and reckonings contradicting dates, there could be but one conclusion—the sculptors had made mistakes. Nor is it to be wondered at when we consider how difficult it is to-day, with all the compositor's intelligence and the carefulest scrutiny of the proof-reader, to avoid error in a page of print. The old Maya sculptors were probably not over-intelligent, and their work presumably underwent no proof-reading. If but few artists were engaged on one of the great stelæ or altar-pieces, the author of the inscription and the original workmen could hardly have lived to see the work completed; if many were employed, they must have over-swarmed and confused each other. Either circumstance would render the liability to error very great; so the surprise perhaps should be that the mistakes are not more numerous. But the number may be greater than is at present apparent, for it is only in the numeral signs and the day, month, and other period symbols that we are able to detect them. What other mistakes there may be we shall not know until we are equally familiar with the rest of the glyphs. To prove beyond a doubt the existence of errors, due probably to the carelessness of the sculptors, I shall go very circumstantially over two inscriptions having the same initial date and covering the same ground.

### STELA F. West side.

Initial date: 54—9—14—13—4×17—12 Caban—5 Kayab. The period numbers here are expressed by face numerals. Following this date are fifteen indeterminable glyphs. They do not include the usual initial directive series, but they probably serve the same or a similar purpose, for we can distinguish a number of period symbols with accompanying numerals, though unable to determine their meaning here. Then comes a reckoning which reads, reversing the order of the periods, for convenience—as I shall do in all cases when necessary: 13—9×9, from 12 Caban—5 Kayab, the initial date, to 6 Cimi—4 Tzec. We will ascertain if this is correct.

AHAU COUNT.		YEAR COUNT.	
13 ahaus .....	4,680 days.	51st year.....	39 days.
9 chuens.....	180 „	13 years .....	4,745 „
9 days.....	9 „	13th year .....	85 „
<hr/>		<hr/>	
4,869 days.		4,869 days.	

To explain the foregoing computation. Turning to the annual calendar we find that 12 Caban-5 Kayab occurs in the 51st year, and that there are 39 remaining days in that year. To these add 4,745, the number of days in thirteen years, which a glance at the working-chart will show us is the greatest number of years there can be in the period. This will bring us around to the 13th year of the annual calendar. There are yet 85 days left, which will take the count to 4 Tzec, where we find 6 Cimi. So the record is correct. Eleven glyphs, mostly illegible, succeed. One of them is probably the 360 bissextile sign. It will be noticed that the computation has just passed the date where an even ahaú of bissextiles accrues. As the next date has no reckoning in the ordinary form leading up to it, I suspect it to be one of the cases where the count is expressed in another way. The date is 3 Ahau-3 Mol. An unusual character follows, after two intervening glyphs, which I think indicates that the date is the beginning of a 10th ahaú, as it is. Next comes the sign denoting it to be ten ahaus removed from 4 Ahau-13 Yax—the two glyphs between, in my judgment, indicating the same period in a different manner. Here is a full stop. The next reckoning reads: 1-16-13×3, from 12 Caban-5 Kayab, the initial date, to 1 Ahau-3 Zip, and 10 ahaus more to 13 Ahau—and, if the rest of the glyphs were not obliterated, we should probably find the continuation to be-18 Cumhu, the beginning of the 17th katun. We will test this reckoning also:—

AHAU COUNT.		YEAR COUNT.	
1 katun .....	7,200 days.	51st year .....	39 days.
16 ahaus .....	5,760 „	36 years .....	13,140 „
13 chuens.....	260 „	36th year .....	44 „
3 days.....	3 „	<hr/>	
<hr/>		<hr/>	
13,223 days.		13,223 days.	

We find this to be correct also. By looking at the chronological calendar it will be seen that from 1 Ahau-3 Zip to 13 Ahau-18 Cumhu it is just 10 ahaus, so that need



not be reckoned. I call attention to the fact that in this inscription a form of the *ben-ik* character is used both with the day and katun as a numeral for 1. There are 67 glyphs here. Of that number we are able to construe definitely the meaning of 37. Of the remaining 30 we know quite half to be directive signs or symbols for periods. So there is little room left for anything besides the chronological record.

## STELA F. East side.

Initial date: 54—16—10—18×20—1 Ahau—3 Zip. Here the month symbol does not come until after the initial directive series. The glyphs that immediately follow are so fantastic and unfamiliar that I can make nothing of them until the sign indicating a date to be some score days in the 19th katun is reached. The date is 5 Ahau—13 Mol. As that begins the 1st ahau, the number of score days indicated must be 18. Two unintelligible glyphs follow, succeeded by what I believe to be this reading: 3 cycles, 8 katuns and 19 ahaus, a reckoning embracing 26 calendar rounds and extending 360 8-score days into the 13th cycle, to 1 Ahau—13 Yax, the beginning of a 360-bissextile count and of a katun also. This is the inscription I regard as the strongest support to my theory of the Maya bissextile scheme. The month symbol looks as if it might have been intended for Yaxkin, but if so it is a mistake. The rest of the glyphs on this side of the stela are unfortunately mostly destroyed.

## STELA E. West side.

Initial date: 54—9—14—12—4×17—12 Caban—5 Kayab. There is an error in the very initial date. The ahau number should be 13 instead of 12, for the date is identical with that on Stela F west side. A given date can occur only once in a period of two katuns, twelve ahaus, and thirteen chuens; so, all the other factors being the same, the mistake in the ahau number here is beyond question. The initial directive series comes in between the day and month symbols, after which follow seven unintelligible glyphs, though there is good reason for believing them all to be period signs. Then comes a reckoning of 6—13×3, from the preceding date, to 4 Ahau—13 Yax. We will subject this to the same trial that we did the reckonings in the other inscription:—

AHAU COUNT.		YEAR COUNT.	
6 ahaus .....	2,160 days.	51st year.....	39 days.
13 chuens.....	260 „	6 years .....	2,190 „
3 days.....	3 „	6th year .....	194 „
	<hr/> 2,423 days.		<hr/> 2,423 days.



The count is right. Two illegible glyphs follow, and then comes another reckoning. The reading (reversing the order of the periods, as I have all along) is: 1—14×6, from the preceding date, to 6 Cimi-4 Tzec. Now, we know from the other inscription that the distance from 12 Caban-5 Kayab to 6 Cimi-4 Tzec is 13—9×9; hence, deducting 6—13×3, the first reckoning in this inscription, the remainder must be 6—14×6, and not 1—14×6. The latter count would take us only to 13 Cimi-9 Xul in the 8th year, while the former would carry us to 6 Cimi-4 Tzec in the 13th year, which we know to be the date intended. Therefore there can be no doubt of the mistake here also. Two unintelligible glyphs intervene, and then there is another reckoning. It reads: 1—1—16×15, from the preceding date, to 11 Ymix-19 Muan. Let us test it:—

AHAU COUNT.		YEAR COUNT.	
1 katun .....	7,200 days.	13th year .....	280 days.
1 ahau.....	360 „	20 years .....	7,300 „
16 chuens.....	320 „	34th year .....	315 „
15 days.....	15 „		
	<hr/> 7,895 days.		<hr/> 7,895 days.

This reckoning brings us to 10 Ymix-14 Pax, a date nowhere mentioned and clearly not the one intended. Manifestly there is another mistake here. Let us see if we can find out what it is. The succeeding reckoning is: 8—4×19, from the preceding date, to 13 Ahau-18 Cumhu, the 17th katun. 13 Ahau-18 Cumhu begins the 17th katun, and cannot occur again during it, therefore we can reckon back from that point with certainty. We find the date in the 45th year of the annual calendar. Going backwards, there are 358 days on that page, to which add 2,555, seven years, and there will still be 66 days to be counted in the 37th year, which will bring us to 11 Ymix-19 Muan, the date in question beyond any doubt. To recapitulate:—

AHAU COUNT.		YEAR COUNT.	
8 ahaus .....	2,880 days.	45th year.....	358 days.
4 chuens.....	80 „	7 years .....	2,555 „
19 days.....	19 „	37th year .....	66 „
	<hr/> 2,979 days.		<hr/> 2,979 days.

Having ascertained in this way the position of the date, we are able to correct the former reckoning, which should be 1—4—16×15,—not 1—1—16×15,—as the subjoined calculation will show:—

AHAU COUNT.		YEAR COUNT.	
1 katun .....	7,200 days.	13th year .....	280 days.
4 ahaus .....	1,440 „	23 years .....	8,395 „
16 chuens.....	320 „	37th year .....	300 „
15 days.....	15 „		
	8,975 days.		8,975 days.

By this reckoning we arrive at 11 Ymix-19 Muan, to which the other count led back; so we are satisfied about this mistake also—making three grave mistakes in a single inscription. I have been thus explicit in order to prove that the mistakes to which I so often allude exist elsewhere than in my imagination. We shall come across many more of them, but hereafter I shall content myself with simply pointing them out.

#### STELA C. East side.

Initial date: 54—13—20—20—18×20—4 Ahau-8 Cumhu. This date is the beginning of the 54th great cycle. No dates or reckonings in the usual style follow it, but instead there are groups of characters with signs indicating a reckoning from a preceding date to the beginning of a cycle, katun and other periods. There are five of these divisions. Not knowing the exact value of the characters employed, I cannot speak positively of the purpose, but I surmise that it is to show how a great cycle can be subdivided into various periods, just as we have seen the cycle variously reckoned. If the marred numeral of the cycle symbol near the bottom were plainly 13, as I believe it to be, I should have no doubt of the glyphs being a reckoning from a 13th to a 13th cycle, covering just a great cycle period.

The inscription on the other side of this stela begins with a great cycle sign that has a day symbol in it. The date under it reads: 9—1—20—18×20, from the preceding date, 6 Ahau-13 Yaxkin—showing that it is subordinate to the former date, and, inferentially, that it marks the time of the erection of the stela. It is followed by four glyphs, indicated by the succeeding one to be a reckoning from the preceding date. We are familiar with some of the characters, but the unknown ones baffle all attempts to make out the calculation. Two strange glyphs follow, and then comes a

reckoning in the common style :  $17-5-18 \times 20$ , from the beginning of the cycle, to 6 Ahau-13 Kayab, and 5 ahaus to the beginning of a 10th ahau. Though two of the three remaining glyphs in this column are familiar, it is impossible to say what they mean here, as is the case with those at the base.

STELA A. East side.

Initial date :  $54-9-17-5-18 \times 20-6$  Ahau-13 Kayab, which is announced to be a 5th ahau. It will be noticed that this date is the same as the last one on the preceding stela. The month symbol here comes after the initial directive series. The meaning of many individual glyphs in the rest of this inscription is known to us, but they are associated with so many others whose meaning we do not know that it is impossible at present to determine the purpose of the record.

STELA J. Back.

Initial date :  $9-16-5-18 \times 20-8$  Ahau-8 Zotz. Here likewise the month follows after the initial directive series, and it is added, as in a former case, that 5 ahaus in addition will bring the reckoning to the beginning of a 10th ahau. There are no more reckonings in the inscription and nothing further is positively determinable about it; but, from the bissextile sign occurring twice and the appearance of other signs found in connection with the important 4 Ahau-13 Yax, I think the reading in some way goes back to that date.

## THE COPAN INSCRIPTIONS.

THE majority of the Copan inscriptions are the least profitable of any to the student, as they contain few reckonings or formulas revealing the significance of the glyphs. Most of them revolve about the important date 4 Ahau-13 Yax, and consist chiefly of symbols for periods terminating or beginning at that point. As a bare statement of that fact affords no insight into the exact meaning of the signs, their value must remain an unsettled question until one by one they are found in positions that enable us to determine it.

## STELA A.

Initial date: 54—9—14—19—8×20—12 Ahau-18 Cumhu. The month symbol comes after the initial directive series, which here consists of nine glyphs. The purport of the succeeding twelve glyphs is unintelligible, though the fact that the last is a 260-day symbol would seem to indicate that they are getting to an even count of that number of days. This is accomplished by receding 3 chuens from the initial date, which is just 10 chuens or 200 days from 4 Ahau-13 Yax, the beginning of the 260-day as well as nearly all other counts. Hence we have, beginning at glyph 15, 3 chuens from the initial date back to 4 Ahau-18 Muan. After an intervening glyph, the 260-day sign is repeated—this time not a face but the *cauac* symbol, and this time not manœuvering for a 260-day position, but carrying the reckoning forward that number of days from 4 Ahau-18 Muan. Here the beginning of nearly everything is arrived at, as shown by the succeeding thirty or so glyphs, most of which are recognizable as symbols used in other connections to denote periods of time. Finally the date to which the reckoning has been extended is specifically designated to be 10 chuens, beginning from a date back of the preceding one, being in fact 4 Ahau-13 Yax, either a certain number of score days in the cycle or the initial score of a katun, and the beginning of the 15th katun—to be entirely explicit, the reckoning being from 12 Ahau-18 Cumhu. From this point to the end there are no more reckonings. The glyphs are merely a list of signs for periods—thrown in haphazard perhaps, but more likely arranged according to a certain computability, as shown in glyph 50, where the 13 ahau and 10 ahau symbols are placed side by side. A similar collection of time symbols without any reckonings is encountered elsewhere with this same date; hence it is reasonable to infer that they represent periods that round up evenly with it.



## STELA B.

Initial date: 54—9—15—20—18×20—4 Ahau—13 Yax. This is the all-important date. There are no reckonings at all in the inscription, the initial directive series even being absent. The glyphs undoubtedly are a mere list of periods beginning at this point. Among them the bissextile sign occurs three times, qualified each time by different numeral characters, which I think denote respectively 260, 360 and 234.

## STELA C.

Nearly everything about this inscription appears to be wrong. The principal reckoning does not accord with the dates given. The initial date to the left is 6 Ahau—18 Kayab, designated by the first glyph to be a certain number of score days in a 13th cycle. As all the dates are indicated to be the beginning of ahaus, this particular date must be in the 13th cycle of the 55th great cycle, as no ahau in the 13th cycle of the 54th great cycle begins with 6 Ahau—18 Kayab. In the 55th great cycle it is 13—2—18—18×20. From this date, according to the glyphs as drawn, there is a reckoning of 11—14—5—18×1 to either another 6 Ahau—18 Kayab or to an 8 Ahau—13 Muan; but such a reckoning would reach neither of those dates—both of which are designated as beginning an ahau—even if there were no odd day or chuen. The only explanation I can conceive is that the reckoning is, or was intended to be, 11—17—5—18×20, which is five ahau rounds; and as the same ahau date recurs at each round, the 6 Ahau—18 Kayab would be correct in that event. But this would leave the next date, 8 Ahau—13 Muan, still a mystery, it appearing to have no connection with the preceding dates. As the beginning of an ahau it could not occur anywhere in the vicinity except at 54—12—16—1—18×20. The second section, like the first, begins with a glyph indicating the date to be certain scores of days in the 13th cycle. The day number is given as 15, but of course that is impossible. From a later examination of the stone Maudslay thinks it may be 9 or 5. It is probably the former, the date in all likelihood being—55—13—2—14—18×20—9 Ahau—18 Cumhu. In this event, the character under the ordinary numeral accompanying the month symbol must represent 10. The rest of the inscription is unintelligible, except the two dates, 4 Ahau—18 Uo and 5 Ahau—8 Uo.

## STELA D.

Initial date: 54—9—5—5—18×20—4 Ahau—13 Zotz. The month symbol here probably comes after the initial directive series, and is peculiar in two respects: the bat, which the name of the month signifies, is represented in full instead of by its head, and the numeral is the outflaring sign for 13, which is nowhere else used in connection with a date. This is one of the inscriptions in which I think the number of the great cycle is specifically designated.

## STELA E.

There is absolutely nothing in this inscription by which the date can be fixed, the cycle and katun numerals being unrecognizable. I think the day and month are 2 Ix-7 Yax.

## STELA F.

Initial date: 54—9—14—10—18×20—5 Ahau-3 Mac. This date is given irrespectively of the reading in the inscription, which is as follows: 5 Ahau-3 Mac, 10 ahaus to the beginning of the 15th katun. And then, as usual, come symbols for a lot of periods commencing with that date.

## STELA I.

Initial date: 54—9—12—3—14×20—5 Ahau—the month date should be 8 Uo, but the glyph, which here follows after the initial directive series, is obliterated. There is nothing else intelligible except in the third row. There 10 Ahau-13 Chen is designated as the beginning of a katun—an 8th katun, as given; but the only katun of which that date could be the beginning, during a period of 18,720 years, is the 6th katun of the 8th cycle of the 54th great cycle; hence the 8 is probably a mistake. There follows a reckoning of 8 days and 10 chuens from 10 Ahau-13 Chen to 10 Lamat—the month date not given, but we know it must be 16 Pop.

## STELA J.

West side. Initial date: 54—9—12—12—18×20—1 Ahau-8 Zotz. It is impossible to make anything out of the rest of this inscription, or even to say in what order it runs, except the line crossing near the bottom and continuing at the top of the north face, which reads: 7 Ahau, a 10th ahau, 3 Cumhu, a 10th ahau—20×18—10—6, to the 20th (or initial) score days beginning the 10th cycle—7 Ahau-13 Zip. The month numeral here is a mistake; it should be 18 Zip. The rest of the inscription on the north and south sides has been given elsewhere. East side. Notwithstanding Maudslay's attempt to straighten out these glyphs there is something wrong in their arrangement yet. The initial date is: 54—9—13—10—18×20; the day and month should be 7 Ahau-13 Cumhu, a date we have just seen on the opposite side of the stela. The initial directive series follows and some fragmentary reckonings, but the whole is so incoherent that nothing can be made out of it.

## ALTAR K.

Initial date: 54—9—12—16—7×8—3 Lamat—16 Yax. The initial directive series runs with this date, but is almost obliterated. Little can be made out of the remainder of the glyphs, as they are unusual and fantastic. I think, however, that the reckoning is carried forward to the beginning of the 15th katun, as, apart from the katun symbols near the end, the few recognizable glyphs occur mostly in connection with that date.

## ALTAR L.

A most extraordinary day symbol occurs here, but as the hand below is one of the signs employed at Palenque to denote the beginning of a katun the day is probably Ahau. The only place this date could occur anywhere within reasonable range would be 55—2—6—20—18×20.

## STELA M.

Initial date: 54—9—16—5—18×20—8 Ahau—8 Zotz. The initial directive series succeeds, but beyond that the glyphs are too uncertain and interrupted to make anything out of them.

## STELA N.

Initial date: 54—9—16—10—18×20—1 Ahau—8 Zip. The month numeral is wrong; it should be 3 Zip. The initial directive series and five other unintelligible glyphs complete the first column. At the top of the second column occurs the sign that indicates a reckoning backwards. It is followed by seven glyphs, which I think give in another form the substance of the subsequent reckoning, which is the longest that occurs in any of the inscriptions, embracing a period of 75,264 years. It is given as 14—17—19—10—18×20, from the initial date to 1 Ahau—8 Chen, the beginning of a katun, etc. The reckoning is not only wrong but is absurd as well. The cycles run only to 13, and no such reckoning backward or forward from the initial date would reach a 1 Ahau—8 Chen. But fortunately, despite all the blundering, we can see what the intention was. 1 Ahau—8 Chen begins the 17th katun of the 8th cycle, and thence to the initial date is just 19 katuns and 10 ahaus. The fact that these are the numbers of katuns and ahaus expressed in the reckoning would lead us to suspect that it was to go backward even if the directive sign had not already so informed us, for that would do away with the odd katuns and ahaus and leave the reckoning in even katun rounds. If it were to have gone forward, the odd numbers would have been 3 great cycles, 7 cycles, 9 katuns and 10 ahaus. A little figuring will show the difference. For the sake of clearness I omit all but the great cycle, cycle, katun and ahau periods. It will be borne in mind that 3 great cycles, 8 cycles and 9 katuns

are the equivalent of a katun round—that is, the time that must pass between two occurrences of any given date as the beginning of a katun.

RECKONING BACKWARD.	RECKONING FORWARD.
19—10	
3—8—9—0	3—7—9—10
3—8—9—0	3—8—9—0
3—8—9—0	3—8—9—0
3—8—9—0	3—8—9—0
14—8—15—10	14—6—16—10

In thinking of the odd 19 katuns and 10 ahaus, they blundered in respect to the total period. I think it should be 14—8—15—10—18×20. If so, the reckoning goes back to the 40th great cycle; if it went forward, it would extend to the 69th. It is not material which way it be decided. The important fact is that in either case they ranged over a period of more than 75,000 years, which substantially proves my estimate of the immense reach of their chronological calendar. There are a few glyphs following the reckoning and date in the same column, but they do not assist us, nor can anything beyond the dates and a few disconnected characters be made out of the rows of glyphs around the base.

#### STELA P.

Initial date: 54—9—9—10—18×20—2 Ahau—13 Pop. The month symbol here comes after the initial directive series. This is the strangest inscription of all. Its style is so cursive, or in some way the glyphs are so changed from their ordinary appearance, that there is doubt even about the initial date. It is not plain if the day numeral was intended for 2, though I think it was—the sign for a 10th ahau following the date fixing its position with tolerable certainty. Nothing more can at present be made out of the inscription, beyond the fact that the thrice recurring bissextile character and the numerous beginning signs indicate pretty clearly that the reckoning goes forward and the glyphs mostly relate to the important date beginning the 15th katun. If so, it is the first of the stelæ to point to that great event.

#### ALTAR Q.

There is more than the usual uncertainty here. It is doubtful where the inscription begins. It is equally doubtful if the glyphs under the sixteen personages on the sides are part of the text or merely symbols for periods of which the figures seated upon



them are personifications—the breastplate in each case denoting the number of days typified. The date between the two individuals facing each other, 6 Caban–10 Mol, is one that occurs on other altars and on a stairway, and must be one to which particular importance was attached.—The top of the altar has an inscription reading regularly. Between the first two dates, 5 Caban–15 Yaxkin and 8 Ahau–18 Yaxkin, the distance in the annual calendar is but 3 days, but I think one of the intermediate characters indicates it to be one or more calendar rounds in addition; as it does in the next instance, where 5 Ben–11 Muan is indicated to be only 7 chuens and 12 days distant—the 12 is a mistake; it should be 13, the dates being 153 days apart. An unintelligible reckoning follows, succeeded by a 17th katun sign and 6 Ahau–13 Kayab, the date probably being indicated to be the one beginning the 5th ahau of the 17th katun of the 9th cycle. The next and last date is 5 Kan–13 Uo (it should be 12 Uo, because Kan cannot fall on the 13th day of a month), which is stated to be 3 chuens and 4 days from the preceding date—a fact I believe to be indicated by two other glyphs.

#### ALTAR R.

Beyond the two dates, 6 Caban–10 Mol and 7 Ahau–3 Zip, absolutely unintelligible.

#### ALTAR S.

Initial date: 54—9—15—20—18×20—4 Ahau–13 Yax. This is the all-important date again. It will be noticed that the initial directive series is absent here also. Two unintelligible glyphs succeed the date and then there is the reading: 5 katuns from the initial date to 7 Ahau–18 Zip, the beginning of the 10th cycle. I do not know the value of the three remaining glyphs.

#### ALTAR U.

So much of this inscription is illegible and so much of the remainder is unintelligible—excepting a few dates and other well-known characters—that nothing connected can be made out of it.

## THE PALENQUE INSCRIPTIONS.

THE inscriptions at Palenque are longer and completer and their reckonings, as a general thing, range over far greater periods than those of Quirigua and Copan. They also have more diversity in respect to examples showing the different methods of computing time. So, altogether, they furnish more and better material for study than all the other cities combined.

### TEMPLE OF THE CROSS.

Initial date : 53—12—19—13—4×20—S Ahau-18 Tzec. The initial directive series follows, succeeded by five glyphs whose purpose is not intelligible, but which, among other things, must take the reckoning back twenty days to 1 Ahau-18 Zotz, that appears for some reason to be thereafter regarded as the initial date. After three glyphs, which are probably directives stating that the computation is from that date, there is a reckoning of 8—5×20, with the directive signs repeated, to 4 Ahau-8 Cumhu, beginning the initial score days of the 13th cycle. This reckoning is a mistake. It should be either 6—14×20, the distance from 8 Ahau-18 Tzec to 4 Ahau-8 Cumhu, or 6—15×20, the distance from 1 Ahau-18 Zotz—more likely the latter, as it will presently be seen that other reckonings go back to that date. Then follows another reckoning of 1—9×2, succeeded by five unintelligible glyphs, to 13 Ik-5 Mol. The computation and the 13 Ik are right, but the month date should be 20 Chen, as will be seen by reference to the annual calendar. It will be evident pretty soon that the sculptors got their copy mixed up. The 5 Mol should have gone with another date. After half a dozen glyphs, unintelligible further than like most intervening characters they are to be found elsewhere in the lists of period symbols, there is another reckoning : 1—18—3—12×20, from the preceding date, to 9 Ik-15 Ceh. This is correct, and in connection with the previous reckoning it proves conclusively that the preceding date should be 13 Ik-20 Chen. Six unintelligible glyphs follow ; then there is a reckoning of 2—1—7—11×2, succeeded by four directive signs, to 9 Ik-20 Zac. I call attention to the directive signs. Two of them are the bissextile character and its coadjutor, which I think are employed in Palenque to denote different numbers of calendar rounds. These should denote fifteen, if intended to indicate the length of the reckoning ; if to express an additional period, it is uncertain how many. The other two directive signs are identical with two of those used after 1 Ahau-18 Zotz to show the reckoning is from that date. This reckoning is also from that date ; hence the

glyph consisting of a bird's head and two signs for 20 over it probably indicates an initial date—or a substitute for it, as 1 Ahau-18 Zotz would appear to be in this case. The month symbol is wrong here also. It should be Yax instead of Zac. The reckoning which follows: 3—6—10—12 $\times$ 2, from the beginning of the great cycle, to 9 Ik, is correct. It is here the 5 Mol should have gone, that being the month date. The reckonings from this point are the ones to which I have alluded in a preceding section. I think they are carried forward principally by bissextile signs indicating the different numbers of calendar rounds to be added to the brief reckonings notated in the usual style, supplemented by some other signs denoting a specific number of days. Starting from the beginning of the great cycle, the 9th cycle is reached with only what amounts to 3 katuns, 2 alhaus, 4 chuens and 18 days being designated in the ordinary way during that immense stretch of time. Some other method of computation must be made use of, and I can conceive of none but the one I have suggested. As this same style continues to be used after the 9th cycle is passed and there are no more general dates like it to guide us, it is impossible to say how far or to what point the remaining reckonings extend; but it is likely if they go beyond the 9th cycle that they return to it at the close, as the concluding dates are the same as those in tablets yet to be mentioned.

#### TEMPLE OF THE SUN.

Initial date: 54—1—18—5—3 $\times$ 6—13 Cimi-19 Ceh. The month symbol comes after one of the glyphs of the initial directive series. A reckoning of 1—2 $\times$ 11, with three unintelligible glyphs following, points to a date which appears to be 1 Caban-10 Tzec; but as that is not the date to which the intelligible part of the reckoning would lead, both the date and direction are uncertain. Thirteen glyphs follow, some of them of recognizable purport, but the exact meaning of which in this connection I do not know. Then comes a re-statement of the initial reckoning, 1—18—5—3 $\times$ 6, from the beginning of the great cycle, followed by nine glyphs whose use here is unintelligible, though four of them are signs with whose meaning we are acquainted. Next in order comes a reckoning of 9—12—18—5 $\times$ 16 (followed by four glyphs nearly identical with a series in the preceding inscription), from 4 Ahau-8 Cumhu, the beginning of the great cycle, to 2 Cib-14 Mol. This is correct. After five incomprehensible glyphs occurs the date 3 Caban-15 Mol. In the annual calendar the last two dates adjoin each other, but whether the latter is here intended to be the succeeding day, or whether some calendar rounds are indicated by the characters preceding it, is something we are at present unable to determine. Sixteen baffling glyphs follow, and then there is a reckoning of 7—6—12 $\times$ 3—12 Ahau-8 Ceh. There are no recognizable directive signs here, but by trial we discover that the reckoning is the distance between 12 Ahau-8 Ceh and 9 Akbal-6 Xul, a date that comes after six

intervening glyphs. Eight more unintelligible glyphs occur, and then a reckoning of  $6-2 \times 18$  (the 18 should be 17), 2 Cimi-19 Zotz. The directive signs are unfamiliar, but as the reckoning is backwards to 9 Akbal-6 Xul they probably denote that fact. Next is:  $1-8 \times 17-13$  Ahau-18 Kankin, which is declared to be a 10th ahau, the reckoning being the distance from 9 Akbal-6 Xul to that date. Both of these dates are subsequently repeated for some reason, and the record ends with 8 Oc-3 Kayab, followed by ten glyphs whose meaning is not apparent.

#### TEMPLE OF THE FOLIATED CROSS.

Initial date:  $54-1-18-5-4 \times 20-1$  Ahau-13 Mac. This date is just fourteen days later than the initial date of the preceding inscription. The directive series follows, succeeded by a reckoning of 14 chuens and 19 days to 1 Cauac-7 Yax. Eleven unreadable glyphs come next, and then:  $1-14-14 \times 20$ , which, after four uncertain directive characters, is declared to be a reckoning to the beginning day score of the 2nd cycle, 2 Ahau-3 Uayeb. It is correct. Then come two reckonings in an unfamiliar style, the first from the beginning of the great cycle, the second from 1 Ahau-13 Mac. I am positive of this, for the very next reckoning will show that there are 40,000 days to be accounted for somehow, and they can be represented only by one of these counts. That reckoning is:  $7-7-7-3 \times 16$ , to 2 Cib-14 Mol. Subsequent computations show that date to be the one to which  $9-12-18-5 \times 16$  led up in the preceding inscription, hence the necessity for something to explain the missing 40,000 days. As from this on the reckoning and dates of the two inscriptions are nearly the same, it is not worth while to repeat them; I will, however, give a synopsis showing the position of the dates in both:—

$54-1-18-5-3 \times 6-13$  Cimi-19 Ceh.  
 „  $-1-18-5-4 \times 20-1$  Ahau-13 Mac.  
 „  $-1-18-6-18 \times 19-1$  Cauac-7 Yax.  
 „  $-2-20-20-18 \times 20-2$  Ahau-3 Uayeb.  
 „  $-9-3-1-15 \times 20-12$  Ahau-8 Ceh.  
 „  $-9-10-2-6 \times 6-2$  Cimi-19 Zotz.  
 „  $-9-10-8-9 \times 3-9$  Akbal-6 Xul.  
 „  $-9-10-10-18 \times 20-13$  Ahau-18 Kankin.  
 „  $-9-12-11-12 \times 10-8$  Oc-3 Kayab.  
 „  $-9-12-18-5 \times 16-2$  Cib-14 Mol.  
 „  $-9-13-20-18 \times 20-8$  Ahau-8 Uo.



## TEMPLE OF INSCRIPTIONS.

Initial date : 54—9—4—20—18×20—13 Ahau—18 Yax, declared by a subsequent sign to be the beginning of a katun, and by the five following ones, I think, a certain distance from the beginning of the cycle. These signs may possibly be substituted for the initial directive series, which is absent. The defaced condition of the next ninety glyphs leaves little discernible for a certainty, but the following dates and declarative signs can just be made out through the dimness: 11 Ahau—18 Tzec, the beginning of the 5th katun; 9 Ahau—3 Uayeb, the beginning of the 6th katun; 13 Akbal—11 (or 16) Cumhu; 9 Ahau—18 Muan, a 13th ahau; 7 Ahau—3 Kankin, the beginning of a katun (the 7th); 13 Ahau—18 Ceh, the beginning of a 5th ahau. It is not my purpose to particularize the glyphs of this long inscription. I have made several lengthy extracts from it to illustrate the methods of reading the glyphs, and I could say little now that would not be virtually a repetition of what has already been said. But I will give a few more dates in order to show that the principal purpose of this inscription was to score along from katun to katun, with incidental discussions on the science of chronology, illustrated by formulas and greater or less flights in reckoning. There is a singular thing about many of these illustrations, the reason for which is not evident. They seem to pivot on Lamat dates, expressed or implied, reciprocal reckonings between that day and others running all through the inscription. Why this should be is one of the things yet to be found out. Requesting it to be borne in mind that the beginning of four consecutive katuns has already been designated, I will proceed. The next date is 5 Ahau—3 Chen, the beginning of the 8th katun, followed by 5 Ahau—18 Tzec, a 13th ahau. Then comes a puzzling date. It is 13 Ahau—18 Mac, indicated by the sign over Ahau to be the beginning of a katun. There is no katun beginning with that date in the great cycle, and as there is apparently no reckoning except one of 6 chuens and 14 days—showing the distance to 4 Ix—7 Uo, which follows—I am inclined to think the artist made a mistake in carving the katun sign over Ahan. Then comes 3 Ahau—3 Zotz, the beginning of the 9th katun, the 3 Ahau being repeated shortly afterwards; after which is 1 Ahau—8 Kayab, the beginning of the 10th katun, the 1 Ahau also being soon repeated. The second tablet begins with 12 Ahau—8 Ceh, the beginning of the 11th katun. It is in this tablet that the most extended exercises in different methods of scanning periods occur. There is but one other date in it—10 Ahau—8 Yaxkin, the beginning of the 12th katun. The dates in the third tablet begin with a repetition of the foregoing one, and then comes 8 Ahau—8 Uo, the beginning of a katun—which one is not declared, but we know it to be the 13th. Here the regular scoring of the katuns ceases and the reckoning leaps forward to 7 Ahau—18 Zip, the beginning of the 10th cycle; but it is brought back again to go through the exercises shown in one of the extracts referred to.

## INSCRIBED STEPS (PALACE, HOUSE C).

Initial date: 55—3—18—12—15×12—8 Eb—15 Pop. This is one of the dates likely to be disputed. Some of the face numerals are quite indistinct and others rather unusual, so they may not be generally admitted to represent the numbers assigned to them. But I did not rely upon the face numerals in ascertaining the date, for part of them were unknown to me then. I located it by an entirely different method. As the process by which I arrived at the result illustrates one of the many ways in which apparently insurmountable difficulties may be overcome in this study, I will explain it in detail. It will be seen that there are two dates directly under the initial one. Each of these is preceded by an ahau count, which presumably denotes the period between the adjacent dates. We will begin at the bottom one, where the day is a 6 Akbal, without any month sign. The ahau count here is: 3—?—3×3. I have put a query in place of the ahau number because there is uncertainty about the face numeral, owing to our inability to make out all of its details. It can be one only of two numbers, however, 1 or 8, as they are the only faces that ever have the lobate ear ornament protruding against the cheek. This uncertainty compels us to make trial of both numbers, as follows:—

3 katuns .....	21,600 days.	3 katuns .....	21,600 days.
8 ahaus.....	2,880 „	1 ahau .....	360 „
3 chuens .....	60 „	3 chuens .....	60 „
3 days .....	3 „	3 days .....	3 „
	<hr/> 24,543 days.		<hr/> 22,023 days.

The number of days in both reckonings exceeds a calendar round, so we will subtract the number of days in that period, 18,980, from each of the above sums, which will leave respectively 5,563 and 3,043 days. We next take from these the number of days in the greatest possible number of years, which will be 5,475 days, or 15 years, from the former, and 2,920 days, or 8 years, from the latter—leaving as remainders 88 and 123 days, respectively. We now turn to the annual calendar and select a 6 Akbal at random, for there is nothing to indicate in which month or on what day of the month the 6 Akbal we are calculating from occurs. Suppose, then, we select 6 Akbal—1 Zip, in the 17th year of the annual calendar. There are 41 days preceding that date in the year. It must be kept in mind that we are reckoning backwards; hence we subtract 41 days from our last remainders, which will leave respectively 47 and 82 days. Now, to make trial of the former, we go backwards over 15 years of the calendar, which will bring us to the 1st year, and counting 47 days from the end of the year we arrive at 7 Ahau; thus we have ascertained that if the face numeral

in the ahau count be 8, the day numeral in the preceding date must be 7. The trial with the other number is still to be made. Deducting 41 from 123 and there remain 82 days. Passing backwards over 8 years we come to the 8th year, and counting 82 days from the end we reach 5 Ahau: that is, if the face numeral in the ahau count be 1 the day number of the preceding date must be 5. Now let us inspect the preceding date itself. It is almost obliterated. The only things clearly discernible are the outlines of the day and month signs, the former preceded by an unusual character, the latter by an indistinguishable face numeral. But for all this barrenness we can reach several conclusions respecting it pretty definitely. The day, as proved by the reckoning, must be Ahau; hence the face numeral of the month must be 3, 8, 13 or 18; and, as its outlines are not those of the unmistakable 13 face, one element of uncertainty is eliminated; but we can go no farther in that direction. The month, however, is unquestionably Mol, as the symbol for that month is the only one that ever occurs as a simple disc, without accessories above, below or on either side. All this is not much, but it is something; so we will proceed with our calculation, confident that we have a 7 or 5 ahau, falling on the 3rd, 8th or 18th of Mol, to reckon from. The ahau count preceding this date fortunately is unmistakable. It is  $12-9 \times 8$ , or 4,508 days. From this we take 11 years, or 4,015 days, leaving a remainder of 493 days. We could have taken 12 years, but knowing that we shall have to deduct the 143 days in the year preceding the first place in Mol on which an Ahau date could fall, which in the end would have reduced the years to 11 anyhow, we chose to deduct only that number at the start. Subtracting 143 from 493, we have 350 remaining days. We will first make trial with 7 Ahau-3 Mol, which we shall find in the 20th year of the annual calendar. Going back 11 years brings us to the 8th year, and counting 350 days from the end of that year we arrive at 10 Eb-15 Pop. Turning now to examine the initial date, to which we have reckoned back, we feel positive, notwithstanding the defacement of the sign, that the month is Pop, as the distinguishable parts of the glyph have the characteristics of the symbol for that month and of the symbol for that month only. The face numeral accompanying is strange, however. We have never encountered it before; but it is to be recollected that 15 has been lacking in the series of face numerals. If this date prove to be 15 Pop, we shall have supplied the deficiency. The day sign is not readily recognizable, but Eb is one of the three days ever symbolized by a human face, and therefore this may reasonably enough be Eb. But the accompanying face numeral is not 10; the lobate ornament on the cheek denotes it to be either 1 or 8—remember we have not yet learned to distinguish it by the forehead mark. We must go back and make another trial. But first let us reckon our gain by this one, failure though it be. We are confident this month is Pop and that the other is Mol. That being the case, the dates can be only 15 Pop and 3 Mol, for if the Ahau in question fell upon any of its succeeding positions in the month of Mol the reckoning would not reach back to Pop. Hence, we have made two



substantial gains; we have discovered the face sign for 15, and we know that our Ahau falls on 3 Mol. And, moreover, we have eliminated 7 Ahau from the problem. Now let us test 5 Ahau-3 Mol. It occurs in the 44th year of the calendar. Turning back 11 years we come to the 32nd year, and counting off the 350 days we reach 8 Eb-15 Pop. This is more satisfactory, for we felt certain the day numeral must be 1 or 8. Assuming the date to be 8 Eb-15 Pop we have now a base from which to reckon the initial count and fix its place in the chronological calendar. The day being Eb, it follows that the odd days in the count must be 12; and, the chuen numeral being identical with that of the month, that the number of chuens must be 15. Let us run back that distance on the annual calendar and find the date with which the ahau begins. It is 8 Ahau-8 Zotz, in the 31st year. We may fancy we recognize all the other face numerals now, but we will be cautious. One of them, however, is unmistakable—the 18 face attached to the katun symbol. That is all we want. We have only to look through the chronological calendar till we find 8 Ahau-8 Zotz occurring in an 18th katun in order to arrive at the date, for the same date cannot fall in the same katun but once in 18,720 years—a pretty reasonable margin to work upon. In this instance we look in vain throughout the whole 54th great cycle for the desired concurrence. It is not till we come to the 55th great cycle that we find an 8 Ahau-8 Zotz falling in the proper katun, and there it is the 12th ahau of the 18th katun of the 3rd cycle—as we divined it would be from the face numerals.



## THE REASON FOR THE PREPONDERANCE OF DATES IN THE NINTH CYCLE.



THE numerical preponderance of stelæ, altars, and mural inscriptions dated at some point in the 9th cycle of the 54th great cycle, would seem to indicate that this 9th cycle was the period of the most high and palmy state of the Archaic Maya empire. But I think this apparent superiority is deceptive and misleading. Not in regard to that period having been an exceedingly flourishing one, but in respect to its having surpassed in glory either previous or subsequent eras in their history. There is a particular reason why there should be more evidence of activity and grandeur during that cycle than throughout all the rest of their cycles of which we have any knowledge.

The disposition to observe anniversaries, jubilees, centenniums, and other notable periods of recurrence, is one of the strongest and most prevalent instincts of mankind. It is fostered in the child by the annual observance of its birthday, and strengthened in the adult by the celebration of social, religious, and national anniversaries. When the occasion has the magnitude of a jubilee or centennium, a whole nation becomes agitated over the event and expends its energy in the erection of statues, monuments, and other memorial designs to commemorate the occasion. I venture to assert that during the recent jubilee year of the reign of Queen Victoria more statues and memorials were raised in England than will be erected there in the next hundred years, unless some other equally notable event occurs; and that not for another century will America be thrown into the same feverish state of activity and display she has just gone through in her series of centennial celebrations. Yet both England and America were just as great and flourishing in the years that preceded those showy commemorative ones, and will, it is to be hoped, be even greater and more flourishing for untold years to come. Future archæologists, however, may be deceived by the preponderating number of monuments erected during those two eventful years, and declare that at those periods, respectively, England and America attained the summit of its glory.

Now, in Maya chronology, the 9th cycle of the 54th great cycle embraced a date, an event, an occasion, an anniversary, a conjuncture—I cannot find a word to express exactly what I mean—more significant and momentous than anything we can conceive of as possible to happen in our national annals or in the history of the world. It was a point at which all the multitudinous periods of their different styles of reckoning, except the cycle and great cycle, came to an end and began anew. The conjuncture could occur only at intervals of 18,720 years. Even then, others would not have the importance of this particular occurrence; for, in addition to being a terminal and beginning point of all the periods, this one marked the commencement of the last quarter of their grand era—280,800 years had passed; there was only a trifle of 93,600 years more to be got over before their grand period would have run its course.

The importance of this particular occasion kept Copan, Quirigua, Menché and Tikal in a state of agitation for fifty years before and after; that is, they had a whole century of jubilation instead of a single brief year. Even as long as a hundred and fifteen years before, a stela went up telling that this chronological circus was coming, how long it would be before it arrived, and what periods would intervene and round themselves out meanwhile. But it was not till many years later that these advance agents, as it were, began to come thick and fast. Then all sorts of bill-boards—monuments, altars and dead-walls—were erected and placarded all over with posters stating that the greatest show for 18,720 years was at hand, and what periods would end and begin again, and what other wonderful feats of chronological jugglery would be performed. The occasion itself finally came, and the fact of its being the end-all and beginning-all of nearly everything is duly chronicled on stela, altar and wall. The performance appears to have been perfectly satisfactory and well worth the price of admission, as our modern journals would say. But do not think that the excitement ended with the actual occurrence. As for fifty years and more before they had been loud in the announcement that it would presently come, so for fifty years and more after they were vociferous in the statement that it had just gone. Then they appear to have become calm again. The great event had passed far enough behind to no longer agitate them, and the people of the Archaic empire resumed the even tenor of their way.

With all the agitation and excited activity which appear to have characterized this jubilee period, it must not be supposed that the numerous memorial monuments and inscriptions which resulted have nothing but a bald relevancy to the principal event. The schoolmaster got abroad and improved the opportunity to get in some good work for educational purposes. Some of the inscriptions of this period are almost complete text-books of their periods and methods of computing time. If the schoolmaster had had a more concise graphic style, or had had more space for the exercise of even the diffusive one he possessed, and time had not laid its destroying fingers on his work, there would be little left in the inscriptions for us to puzzle over. As it is, it is evident enough that these inscriptions—whether on stelæ, altars, walls or altar-pieces

—are not mere calendars or records of what kind soever. In addition to supporting objects of adoration and supplying necessary chronological information, they explain the rules and practice of mathematics and chronology, and were undoubtedly the means by which the Maya youth were taught; so we must conclude that temple, stela, altar, or whatever bore an inscription, was designed to meet alike religious, educational, business and all other public requirements.

That there was an extraordinary stimulus to monument building during the 9th cycle on account of the remarkable calendar conjuncture that occurred in it, is attested by several independent considerations. I have explained elsewhere that at Palenque the periods were reckoned from a different starting-point, so that the date I have been discussing as of such moment to Copan, Quirigua and other cities was of no importance to Palenque. Hence, no mention is made of it in any of the inscriptions of that city, although most of them traverse it, or approach to within a few years of it. The initial dates of Palenque—by which I mean the date indicating the era when the inscription was made—move along undisturbed by any excitement over an epoch-marking event, as if such an occurrence must have been far off in their chronology. One is in the 12th cycle of the 53rd great cycle, two are in the 1st cycle of the 54th great cycle, one in the 9th cycle, and the other in the 3rd cycle of the 55th grand cycle. That is—speaking generally, without regard to the difference in katuns and ahaus—they were relatively 2, 8 and 7 cycles apart. In Quirigua there are two unperturbed initial dates, one at the beginning of the 1st katun of the 9th cycle of the 54th great cycle and the other in the 3rd cycle of the 55th great cycle—7 cycles apart. And in Copan there is one stela dated in the 13th or beginning cycle of the 55th great cycle.

The foregoing instances are enough to show that in their normal state of mind the old Mayas were not constantly putting up monuments wholesale. As the range, too, covers a period of over five thousand years, it demonstrates pretty conclusively that the 9th cycle of the 54th great cycle could not have been their only era of prosperity and grandeur. They were simply stimulated to unwonted activity during that cycle by a remarkable commemorative occasion—just as England was in the year of the Queen's jubilee and America at her centennium.

Of course, all the monuments have not been preserved or discovered, and I have not had time to examine entirely what have been photographed or to thoroughly study even those I have seen; but, taking the result of my conclusions from those I have studied, and applying the principle of general average to the rest, I have arrived at the conviction I have attempted to explain in this chapter.



## PROBABLE ERA AND DURATION OF THE ARCHAIC MAYA CIVILIZATION.

It is impossible at present to fix exactly the era of the Archaic Maya nation, and it will forever remain so unless some inscription be found that brings their chronology into accord and aligns it with that of the Yucatecs, Cakchiquels, or some other of the modern branches. The chance for such a discovery is slight, but it is not altogether hopeless. The people of the great Votanic empire were not extinguished absolutely; they were dispersed; and at some point intermediate between their original home and the places where they reappeared as separate nationalities may yet be found records marking the various stages of transition between the different calendars.

But, though no precise determination of the period in which they flourished can be made, I think it possible to approximate very closely to it. There are several indices to guide us in such an attempt. In the first place, the inscriptions themselves show that Palenque, Copan, Quirigua, Menché, and Tikal were contemporaneous, at least at some stage in the existence of each. There is not an instance of diversity in all their calendars; their dates are all correlative, and in most of the records parallel each other. From this is deducible the important fact that—whether a single empire, a federation, or separate nations—they were a homogeneous people, constituting the grandest native civilization in the Western Hemisphere of which there is any record. Yet when the Spaniards arrived upon this theatre of prehistoric American grandeur, there was not only no powerful nation extant but no tradition or memory of former national greatness. The very sites of the ancient capitals were unmentioned, nameless, unknown. This obliviousness could not result from the passage of a few score or a few hundred years. It could only come in the wake of a period that had outlasted the patience and retentiveness of even aboriginal minds. Next, Dr. Otto Stoll, the distinguished comparative linguist, who has made a special study of the Maya dialects, states that the Cakchiquel language, one of the most nearly affined to that of the Tzentsals, who at present occupy the central seat of the extinct empire, is yet different enough to require a period of at least two thousand years to account for the divarication. This points to a remote date of separation, though indefinite. Thirdly, we find in the Yucatec chronicles a definite indication, singularly in keeping with Dr. Stoll's estimate. All the Xiu chronicles begin with a record of the migration of their ancestors, in two great bodies about two hundred and forty years apart, from some region to the westward. From long and



careful study of the annals I have come to the conclusion that these migrations took place respectively about 353 and 113 years before the beginning of our era. That this migration could have come from the Archaic nation only is proved by the identity of the graphic system of the Yucatecs with that of Palenque, Copan, Quirigua, and other cities of the central region—a system found nowhere to the north, south, or west of it. Even to this day the Yucatec language is more closely allied to that of the Tzents and Zotzils of that same region than to any of the other numerous Maya dialects. That the Yucatec calendar and chronological system differ in several respects from those of the Archaic cities is not a final or even grave objection to this theory, but only what under the circumstances might be expected. The Xius found the Cocom and Itzas, older offshoots of the Maya race, already in possession of Yucatan, and appear always to have acted a subordinate part to them in subsequent history. It is not unlikely, therefore, that they changed their methods of computing time so as to conform to those of their superiors; or the change may have been made for some reason not evident to us; but that they did change their methods there can be no doubt, and that too shortly after their contact with the other nations. Two of their chronicles distinctly state that at a time equivalent to about the 257th year of our era “Pop was put in order.” The statement can refer only to a re-arrangement of their calendars, for the calendars themselves had been in existence for unknown centuries; hence, these records probably denote the time at which they changed their chronological methods to conform to those of their neighbors. Our best hope of correlating the calendars lies in the discovery of some record made by the Xius in their new home previous to this change.

If this argument should be rejected and the divergence of the calendars be insisted upon as an insuperable obstacle to my theory, I will retreat to the invincible position behind the graphic systems, and ask in what other quarter can be found such an identity. There can be but one candid reply—nowhere. Yet a graphic system is the very thing most likely to persist. Empires have been dismembered and become separate nations with different languages and institutions, their original alphabet being the only thing retained by them in common. The scattered branches of the English race have changed many systems more radically than the difference in question, yet have held throughout to a common graphic one. So with the migrating Tutul Xius. Whether the changes in their calendars originated with themselves or were made in conformity to the usages of fellow-nations, is immaterial, since the persistency of habit vindicated itself in the retention of their native graphic system—if not, indeed, of their pure mother tongue.

Assuming, then, as I think there is just ground for doing, that the Tutul Xiu exodus took place from the Archaic empire, it is next in order to inquire into the probable causes of it. Such manifest dispersion of a people as these two great migrations show, would not be likely to occur except at the breaking up of some great

nation; for the Mayas were in no sense nomadic, their instinct everywhere seeming to be to cling to their homes until driven from them by force or disaster. What was the cause of the disruption can only be conjectured. The little gleanable from the barren field of Yucatec history discloses three causes that at different times powerfully affected their national existence, any one of which if intensified, under the conditions then existing, might account for the extinction of a far superior civilization. The first of these was invasion by savage hordes; the second, devastation by earthquakes, tornadoes or pestilence; the third and most important—the one that had destroyed all of power and glory in Yucatec civilization years before the coming of the Spaniards—was domestic war. The first two of these causes would operate quickly, and might suddenly arrest a people at the very height of their prosperity; the last would be of slower effect, requiring a century, or even centuries, perhaps, to bring about the final downfall—but, whatever the duration of the period, it would be one of decadence. There would be no rearing of cities or temples, progress being arrested in every direction except that of the nation consuming itself. The chronicles tell of no city founded in Yucatan later than Mayapan. For five hundred years thereafter the nation was too busily engaged in self-destruction to find time to build cities.

Whichever of the causes indicated occasioned the downfall and dispersion of the great Archaic nation, it must have had its full benumbing and repressive effect before the first of the migrations recorded in the Yucatec chronicles, so that we need look for no evidence of improvement subsequent to that date. The fact of the migrations having been over two hundred years apart points pretty directly to internal dissension as the cause of dispersion, though the later comers may have been a discouraged remnant that had struggled on through those years hoping to overcome the evils of pestilence or natural calamities. But, in either event, it may safely be assumed that no cities or temples or other monuments of pride and prosperity were reared subsequently to the first migration. How long before it all such activities may have ceased, it is impossible to say; but as in other instances dispersion has not often lagged tardily behind its cause, we may assume that the decline of the Archaic cities followed swiftly upon their attainment to the proudest pitch of glory, the stage at which the fatal brood—jealousy, rivalry and ambition—that comes forth for the undoing of nations, appears always to be hatched. Therefore, taking everything into consideration, I think if the latest initial dates of the Archaic monuments are put a hundred years, say, ahead of the time of the first Xiu migration, we shall not be more than a century out of the way in respect to the ancient chronology, and probably not that far.

Particular emphasis is intended to be laid upon “initial” dates in the foregoing estimate. There are two kinds of dates in the Archaic inscriptions. The dates of one character, and those of most frequent occurrence, appear in the body of the texts, and designate the points from or to which the reckonings extend. Sometimes they are but a day apart; at others, they are a few months or years; while occasionally a flight is

made over thousands of years and back again, with the ease and swiftness with which in Eastern story the couch of the prince is transported by genii. These dates have no significance beyond their relation to other dates and the corresponding reckonings.

But with the other class—the initial dates, as Maudslay has very appropriately named them—it is quite different. The inscription on nearly every temple, stela, and altar, begins with one of them, reciting the great cycle, cycle, katun, ahau, chuen, month and day. Such conspicuousness and circumstantiality, in my estimation, could have but a single purpose—that of recording the date at which the monument was erected. Some of the stelæ have different initial dates on opposite sides, but in these instances one date is reckoned from the other, the later one undoubtedly designating the time of dedication. I think there is nothing we can assume with more assurance of certainty than that these initial series mark the date of erection of the respective monuments.

Taking this for granted also, we will turn to the inscriptions and see to what these conclusions lead. The latest initial date is found on a stela at Quirigua. It is 55—3—19—2—18×20—7 Ahau-18 Pop. That is 2,840 years subsequent to the average of initial dates in the other Quirigua inscriptions. The next latest initial date is on a restored stairway in one of the temples of Palenque. It is 55—3—18—12—15×12—8 Eb-15 Pop. That is 7,082 years later than the earliest initial dates at Palenque. These are long periods; but the limit is not yet reached. In the museum at Leyden is the misnamed “Yucatec” stone, exhumed in digging a cut on the line between British Honduras and Guatemala, about a hundred miles from Copan. It is a thin slab of jadite, about a foot long and four inches wide, if my recollection of it is correct. Both sides are inscribed in rather a rude manner, the rudeness apparently being more attributable to the hardness of the stone than to a lack of skill in the artist. The carving on the front represents a warrior trampling an enemy under his feet. The stone, therefore, is evidently a memorial of some victory or conquest. The inscription on the back consists of an initial date in the Archaic form and characters. It is 53—8—14—3—1×12—1 Eb-5 Zac. That is 8,383 years anterior to the latest initial date in Quirigua. Now, if in accordance with my theory respecting the era of the Archaic cities, the 2,348 years that have elapsed since that Quirigua date was made be added to the above period, we shall arrive at the time when that ancient Maya conqueror trod his enemies under foot—10,731 years ago—the oldest historical date in the world.

Such a vast stretch of national existence as these dates indicate somehow jars upon our sense of propriety and makes us distrust the evidence. But the figures are there; and, unless at some time past they changed character so that they could lie, we must accept the startling revelation. After all, it is only unwont and example by which we are staggered. As to the proposition itself, there is no demonstrated reason why a nation should not exist a million years as well as a hundred. National existence is



analogous to all other forms of life. At first there is the long period of growth, during which the whole tendency is to vigor and unification; then comes the season of maturity, the duration of which is about equally dependent upon the nature of the subject and the enviroing conditions; after that the whole tendency is toward decay and disintegration, which commonly take place in the briefest period of all. We are apt to judge only from the ephemeral existence of modern nations surrounded by co-equal antagonists. As our glance goes back, however, we see longer and longer stretches, till in Egypt we find one almost commensurate with that of the ancient Mayas.

Let us, finally, consider for a moment the possibilities of duration for that Maya empire. The Mayas were a primitive, pure-blooded, united people. No ancestral prejudices or racial jealousies could spring between them. Whatever tendencies there were dependent on the inscrutable laws of nature must all have been in common. They were strong in numbers, and stronger still by their great and solitary enlightenment. They occupied a territory that is practically a fortress. To the east, south, and west there is not area enough to harbor savage foes in numbers that would have been formidable even if coalesced, and to the north, if necessary, they could oppose their united forces. No other great nation ever occupied so secure a position. Hence, the question of danger from outside sources is practically eliminated from the problem of their national existence. Their unity of origin, the simple numeral worship indicated by their monuments, the civic spirit to be inferred from the absence of all warlike insignia in the inscriptions, point unmistakably to a happy, contented, peaceful state of internal affairs, akin to brotherhood. Under such conditions, how long might not a nation endure? We go back ten thousand years and find them then civilized. What other tens of thousand years may it have taken them to reach that stage? From the time of the abrupt termination of their inscriptions, when all suddenly becomes a blank, back to that remote first date, the apparent gradations in the growth of their civilization are so gradual as to foreshadow a necessity for their 280,800 recorded years to reach the point of its commencement. Manifestly, we shall have to let out the strap that confines our notion of history. The field of native nationality in America promises, when fully explored, to reveal dates so remote that it will require a wider mental range to realize them.

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# ARCHAIC ANNUAL CALENDAR.

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THE use to be made of this calendar is too self-evident to require explanation. The numerals of the day Ahau are put in bolder type to assist the eye in looking for any given date. If the day named be not Ahau itself, it is made relative to it by the odd days of the chuen count, so that the position of that day in the month is always the first thing to be ascertained.

I have put Ik at the head of the days because it is nearest to Kan of any of the Archaic dominicals, and because the Oaxacan calendar shows a tendency toward retrogression in the order of the days. There is no good reason, however, why any of the other dominicals may not have been the first. In fact, the frequent and peculiar use of Caban in the inscriptions and its standing as the unit of the numeral series constituted by the day symbols would appear to go far toward justifying an assumption that it was the initial day; but the former circumstance may be only a chance happening, and the latter may attach to the remote pre-Archaic era when the year began with the month Chen; so that neither of these considerations, nor the significant recurrence of Manik in certain places, has had weight enough to induce me to change the order originally adopted; nor will it be worth while to alter it until some style of reckoning from the beginning of the annual calendar is discovered not in harmony with the present arrangement.

For all ordinary purposes the point of beginning is of no importance, since the annual calendar is only an orderly rotation of the days until each of them with the same numeral has occupied the seventy-three places allotted to it in the year— $20 \times 13 = 260 \times 73 = 18,980$  days, or 52 years—when the same succession begins anew. From this it will be seen that unless a count by sub-calendar periods be discovered the matter of its beginning is of no consequence, apart from the satisfaction we experience at any definite knowledge.

The plan of numerating the days of the month is explained in a preceding section.

ARCHAIC ANNUAL CALENDAR.

1ST YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	20
1	Akbal .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	1
2	Kan .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	2
3	Chicchan ...	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	3
4	Cimi .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	4
5	Manik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	5
6	Lamat .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	6
7	Mnluc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	7
8	Oc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	8
9	Chuen .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	9
10	Eb .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	10
11	Ben .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	11
12	Ix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	12
13	Men .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	13
14	Cib .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	14
15	Caban .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	15
16	Ezenab .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	16
17	Cauac .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	17
18	Ahau .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	18
19	Ymix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	19

2ND YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	20
1	Lamat .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	1
2	Mnluc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	2
3	Oc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	3
4	Chuen .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	4
5	Eb .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	5
6	Ben .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	6
7	Ix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	7
8	Men .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	8
9	Cib .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	9
10	Caban .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	10
11	Ezenab .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	11
12	Cauac .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	12
13	Ahau .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	13
14	Ymix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	14
15	Ik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	15
16	Akbal .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	16
17	Kan .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	17
18	Chicchan ...	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	18
19	Cimi .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	19

ARCHAIC ANNUAL CALENDAR.

3RD YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>		.																		
20	Eb .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	20
1	Ben .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	1
2	Ix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	2
3	Men .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	3
4	Cib .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	4
5	Caban .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	5
6	Ezenab .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	6
7	Cauac .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	7
8	Ahau .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	8
9	Ymix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	9
10	Ik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	10
11	Akbal .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	11
12	Kan .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	12
13	Chicchan ...	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	13
14	Cimi .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	14
15	Manik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	15
16	Lamat .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	16
17	Muluc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	17
18	Oc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	18
19	Chuen .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	19

4TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	20
1	Ezenab .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	1
2	Cauac .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	2
3	Ahau .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	3
4	Ymix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	4
5	Ik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	5
6	Akbal .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	6
7	Kan .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	7
8	Chicchan ...	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	8
9	Cimi .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	9
10	Manik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	10
11	Lamat .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	11
12	Muluc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	12
13	Oc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	13
14	Chuen .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	14
15	Eb .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	15
16	Ben .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	16
17	Ix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	17
18	Men .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	18
19	Cib .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	19



ARCHAIC ANNUAL CALENDAR.

5TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	20
1	Akbal .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	1
2	Kan .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	2
3	Chicchan ...	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	3
4	Cimi .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	4
5	Manik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	5
6	Lamat .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	6
7	Muluc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	7
8	Oc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	8
9	Chuen .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	9
10	Eb .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	10
11	Ben .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	11
12	Ix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	12
13	Men .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	13
14	Cib .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	14
15	Caban .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	15
16	Ezenab .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	16
17	Cauac .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	17
18	Ahau .....	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	...	18
19	Ymix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	19

6TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	20
1	Lamat .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	1
2	Muluc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	2
3	Oc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	3
4	Chuen .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	4
5	Eb .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	5
6	Ben .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	6
7	Ix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	7
8	Men .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	8
9	Cib .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	9
10	Caban .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	10
11	Ezenab .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	11
12	Cauac .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	12
13	Ahau .....	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	...	13
14	Ymix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	14
15	Ik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	15
16	Akbal .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	16
17	Kan .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	17
18	Chicchan ...	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	18
19	Cimi .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	19

ARCHAIC ANNUAL CALENDAR.

7TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	20
1	Ben .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	1
2	Ix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	2
3	Men .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	3
4	Cib .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	4
5	Caban .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	5
6	Ezenab .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	6
7	Cauac .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	7
8	Ahau .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	8
9	Ymix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	9
10	Ik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	10
11	Akbal .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	11
12	Kan .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	12
13	Chicchan ..	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	13
14	Cimi .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	14
15	Manik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	15
16	Lamat .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	16
17	Muluc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	17
18	Oc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	18
19	Chuen .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	19

8TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	20
1	Ezenab .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	1
2	Cauac .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	2
3	Ahau .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	3
4	Ymix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	4
5	Ik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	5
6	Akbal .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	6
7	Kan .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	7
8	Chicchan ..	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	8
9	Cimi .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	9
10	Manik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	10
11	Lamat .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	11
12	Muluc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	12
13	Oc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	13
14	Chuen .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	14
15	Eb .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	15
16	Ben .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	16
17	Ix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	17
18	Men .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	18
19	Cib .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	19

ARCHAIC ANNUAL CALENDAR.

9TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yackin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	20
1	Akbal .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	1
2	Kan .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	2
3	Chicchan ...	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	3
4	Cimi .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	4
5	Manik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	5
6	Lamat .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	6
7	Muluc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	7
8	Oc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	8
9	Chuen .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	9
10	Eb .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	10
11	Ben .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	11
12	Ix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	12
13	Men .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	13
14	Cib .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	14
15	Caban .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	15
16	Ezenab .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	16
17	Cauac .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	17
18	Ahau .....	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	...	18
19	Ymix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	19

10TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yackin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	20
1	Lamat .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1
2	Muluc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2
3	Oc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3
4	Chuen .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4
5	Eb .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	5
6	Ben .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	6
7	Ix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	7
8	Men .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	8
9	Cib .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	9
10	Caban .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	10
11	Ezenab .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	11
12	Cauac .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	12
13	Ahau .....	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	...	13
14	Ymix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	14
15	Ik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	15
16	Akbal .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	16
17	Kan .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	17
18	Chicchan ...	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	18
19	Cimi .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	19



ARCHAIC ANNUAL CALENDAR.

11TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	20
1	Ben .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	1
2	Ix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	2
3	Men .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	3
4	Cib .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	4
5	Caban .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	5
6	Ezenab .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	6
7	Cauac .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	7
8	Ahau .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	8
9	Ymix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	9
10	Ik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	10
11	Akbal .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	11
12	Kan .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	12
13	Chicchan ...	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	13
14	Cimi .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	14
15	Manik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	15
16	Lamat .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	16
17	Muluc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	17
18	Oc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	18
19	Chuen .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	19

12TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	20
1	Ezenab .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	1
2	Cauac .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	2
3	Ahau .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	3
4	Ymix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	4
5	Ik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	5
6	Akbal .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	6
7	Kan .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	7
8	Chicchan ...	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	8
9	Cimi .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	9
10	Manik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	10
11	Lamat .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	11
12	Muluc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	12
13	Oc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	13
14	Chuen .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	14
15	Eb .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	15
16	Ben .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	16
17	Ix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	17
18	Men .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	18
19	Cib .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	19



ARCHAIC ANNUAL CALENDAR.

13TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	20
1	Akbal .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	1
2	Kan .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	2
3	Chicchan ...	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	3
4	Cimi .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	4
5	Manik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	5
6	Lamat .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	6
7	Muluc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	7
8	Oc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	8
9	Chuen .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	9
10	Eb .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	10
11	Ben .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	11
12	Ix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	12
13	Men .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	13
14	Cib .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	14
15	Caban .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	15
16	Ezenab .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	16
17	Cauac .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	17
18	Ahau .....	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	...	18
19	Ymix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	19

14TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	20
1	Lamat .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	1
2	Muluc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	2
3	Oc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	3
4	Chuen .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	4
5	Eb .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	5
6	Ben .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	6
7	Ix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	7
8	Men .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	8
9	Cib .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	9
10	Caban .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	10
11	Ezenab .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	11
12	Cauac .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	12
13	Ahau .....	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	...	13
14	Ymix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	14
15	Ik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	15
16	Akbal .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	16
17	Kan .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	17
18	Chicchan ...	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	18
19	Cimi .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	19

ARCHAIC ANNUAL CALENDAR.

15TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	20
1	Ben .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	1
2	Ix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	2
3	Men .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	3
4	Cib .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	4
5	Caban .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	5
6	Ezenab .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	6
7	Cauac .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	7
8	Ahau .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	8
9	Ymix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	9
10	Ik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	10
11	Akbal .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	11
12	Kan .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	12
13	Chicchan ...	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	13
14	Cimi .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	14
15	Manik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	15
16	Lamat .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	16
17	Muluc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	17
18	Oc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	18
19	Chuen .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	19

16TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	20
1	Ezenab .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	1
2	Cauac .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	2
3	Ahau .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	3
4	Ymix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	4
5	Ik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	5
6	Akbal .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	6
7	Kan .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	7
8	Chicchan ...	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	8
9	Cimi .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	9
10	Manik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	10
11	Lamat .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	11
12	Muluc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	12
13	Oc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	13
14	Chuen .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	14
15	Eb .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	15
16	Ben .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	16
17	Ix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	17
18	Men .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	18
19	Cib .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	19

ARCHAIC ANNUAL CALENDAR.

17TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzac.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	20
1	Akbal .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	1
2	Kan .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	2
3	Chicchan ...	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	3
4	Cimi .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	4
5	Manik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	5
6	Lamat .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	6
7	Muluc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	7
8	Oc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	8
9	Chuen .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	9
10	Eb .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	10
11	Ben .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	11
12	Ix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	12
13	Men .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	13
14	Cib.....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	14
15	Caban .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	15
16	Ezenab .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	16
17	Cauac.....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	17
18	Ahau .....	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	...	18
19	Ymix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	19

18TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzac.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	20
1	Lamat .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	1
2	Muluc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	2
3	Oc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	3
4	Chuen .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	4
5	Eb .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	5
6	Ben .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	6
7	Ix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	7
8	Men .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	8
9	Cib.....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	9
10	Caban .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	10
11	Ezenab .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	11
12	Cauac.....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	12
13	Ahau .....	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	...	13
14	Ymix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	14
15	Ik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	15
16	Akbal .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	16
17	Kan .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	17
18	Chicchan ...	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	18
19	Cimi .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	19



ARCHAIC ANNUAL CALENDAR.

19TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	20
1	Ben .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	1
2	Ix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	2
3	Men .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	3
4	Cib.....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	4
5	Caban .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	5
6	Ezenab .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	6
7	Cauac.....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	7
8	Ahau .....	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	...	8
9	Ymix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	9
10	Ik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	10
11	Akbal .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	11
12	Kan .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	12
13	Chicchan ...	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	13
14	Cimi .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	14
15	Manik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	15
16	Lamat .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	16
17	Muluc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	17
18	Oc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	18
19	Chuen .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	19

20TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	20
1	Ezenab .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	1
2	Cauac.....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	2
3	Ahau .....	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	3
4	Ymix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	4
5	Ik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	5
6	Akbal .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	6
7	Kan .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	7
8	Chicchan ...	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	8
9	Cimi .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	9
10	Manik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	10
11	Lamat .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	11
12	Muluc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	12
13	Oc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	13
14	Chuen .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	14
15	Eb .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	15
16	Ben .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	16
17	Ix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	17
18	Men .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	18
19	Cib.....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	19



ARCHAIC ANNUAL CALENDAR.

21ST YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	20
1	Akbal .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	1
2	Kan .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	2
3	Chicchan ...	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	3
4	Cimi .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	4
5	Manik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	5
6	Lamat .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	6
7	Muluc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	7
8	Oc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	8
9	Chuen .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	9
10	Eb .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	10
11	Ben .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	11
12	Ix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	12
13	Men .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	13
14	Cib .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	14
15	Caban .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	15
16	Ezenab .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	16
17	Cauac .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	17
18	Ahau .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	18
19	Ymix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	19

22ND YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	20
1	Lamat .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	1
2	Muluc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	2
3	Oc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	3
4	Chuen .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	4
5	Eb .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	5
6	Ben .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	6
7	Ix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	7
8	Men .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	8
9	Cib .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	9
10	Caban .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	10
11	Ezenab .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	11
12	Cauac .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	12
13	Ahau .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	13
14	Ymix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	14
15	Ik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	15
16	Akbal .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	16
17	Kan .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	17
18	Chicchan ...	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	18
19	Cimi .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	19

ARCHAIC ANNUAL CALENDAR.

23RD YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	20
1	Ben .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1
2	Ix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2
3	Men .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3
4	Cib .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4
5	Caban .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	5
6	Ezenab .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	6
7	Cauac .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	7
8	Ahau .....	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	...	8
9	Ymix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	9
10	Ik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	10
11	Akbal .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	11
12	Kan .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	12
13	Chicchan .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	13
14	Cimi .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	14
15	Manik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	15
16	Lamat .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	16
17	Muluc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	17
18	Oc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	18
19	Chuen .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	19

24TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	20
1	Ezenab .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	1
2	Cauac .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	2
3	Ahau .....	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	3
4	Ymix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	4
5	Ik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	5
6	Akbal .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	6
7	Kan .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	7
8	Chicchan .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	8
9	Cimi .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	9
10	Manik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	10
11	Lamat .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	11
12	Muluc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	12
13	Oc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	13
14	Chuen .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	14
15	Eb .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	15
16	Ben .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	16
17	Ix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	17
18	Men .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	18
19	Cib .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	19

ARCHAIC ANNUAL CALENDAR.

25TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	20
1	Akbal .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	1
2	Kan .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	2
3	Chicchan ...	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	3
4	Cimi .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	4
5	Manik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	5
6	Lamat .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	6
7	Muluc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	7
8	Oc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	8
9	Chuen .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	9
10	Eb .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	10
11	Ben .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	11
12	Ix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	12
13	Men .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	13
14	Cib .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	14
15	Caban .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	15
16	Ezenab .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	16
17	Cauac .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	17
18	Ahau .....	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	...	18
19	Ymix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	19

26TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	20
1	Lamat .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	1
2	Muluc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	2
3	Oc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	3
4	Chuen .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	4
5	Eb .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	5
6	Ben .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	6
7	Ix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	7
8	Men .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	8
9	Cib .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	9
10	Caban .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	10
11	Ezenab .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	11
12	Cauac .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	12
13	Ahau .....	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	...	13
14	Ymix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	14
15	Ik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	15
16	Akbal .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	16
17	Kan .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	17
18	Chicchan ...	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	18
19	Cimi .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	19



ARCHAIC ANNUAL CALENDAR.

27TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	20
1	Ben .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	1
2	Ix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	2
3	Men .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	3
4	Cib .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	4
5	Caban .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	5
6	Ezenab .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	6
7	Cauac .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	7
8	Ahau .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	8
9	Ymix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	9
10	Ik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	10
11	Akbal .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	11
12	Kan .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	12
13	Chicchan ...	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	13
14	Cimi .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	14
15	Manik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	15
16	Lamat .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	16
17	Muluc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	17
18	Oc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	18
19	Chuen .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	19

28TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	20
1	Ezenab .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	1
2	Cauac .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	2
3	Ahau .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	3
4	Ymix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	4
5	Ik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	5
6	Akbal .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	6
7	Kan .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	7
8	Chicchan ...	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	8
9	Cimi .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	9
10	Manik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	10
11	Lamat .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	11
12	Muluc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	12
13	Oc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	13
14	Chuen .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	14
15	Eb .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	15
16	Ben .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	16
17	Ix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	17
18	Men .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	18
19	Cib .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	19



ARCHAIC ANNUAL CALENDAR.

29TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	20
1	Akbal .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	1
2	Kan .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	2
3	Chicchan ...	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	3
4	Cimi .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	4
5	Manik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	5
6	Lamat .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	6
7	Muluc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	7
8	Oc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	8
9	Chuen .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	9
10	Eb .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	10
11	Ben .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	11
12	Ix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	12
13	Men .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	13
14	Cib .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	14
15	Caban .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	15
16	Ezenab .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	16
17	Cauac .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	17
18	Ahau .....	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	...	18
19	Ymix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	19

30TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	20
1	Lamat .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	1
2	Muluc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	2
3	Oc .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	3
4	Chuen .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	4
5	Eb .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	5
6	Ben .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	6
7	Ix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	7
8	Men .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	8
9	Cib .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	9
10	Caban .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	10
11	Ezenab .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	11
12	Cauac .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	12
13	Ahau .....	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	...	13
14	Ymix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	14
15	Ik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	15
16	Akbal .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	16
17	Kan .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	17
18	Chicchan ...	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	18
19	Cimi .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	19

ARCHAIC ANNUAL CALENDAR.

31ST YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	20
1	Ben .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	1
2	Ix .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	2
3	Men .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	3
4	Cib .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	4
5	Caban .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	5
6	Ezenab .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	6
7	Cauac .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	7
8	Ahau .....	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	...	8
9	Ymix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	9
10	Ik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	10
11	Akbal .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	11
12	Kan .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	12
13	Chicchan ...	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	13
14	Cimi .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	14
15	Manik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	15
16	Lamat .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	16
17	Muluc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	17
18	Oc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	18
19	Chuen .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	19

32ND YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	20
1	Ezenab .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	1
2	Canac .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	2
3	Ahau .....	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	3
4	Ymix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	4
5	Ik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	5
6	Akbal .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	6
7	Kan .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	7
8	Chicchan ...	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	8
9	Cimi .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	9
10	Manik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	10
11	Lamat .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	11
12	Muluc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	12
13	Oc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	13
14	Chuen .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	14
15	Eb .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	15
16	Ben .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	16
17	Ix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	17
18	Men .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	18
19	Cib .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	19

ARCHAIC ANNUAL CALENDAR.

33RD YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	20
1	Akbal .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	1
2	Kan .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	2
3	Chicchan ...	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	3
4	Cimi .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	4
5	Manik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	5
6	Lamat .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	6
7	Muluc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	7
8	Oc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	8
9	Chuen .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	9
10	Eb .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	10
11	Ben .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	11
12	Ix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	12
13	Men .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	13
14	Cib .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	14
15	Caban .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	15
16	Ezenab .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	16
17	Cauac .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	17
18	Ahau .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	18
19	Ymix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	19

34TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	20
1	Lamat .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	1
2	Muluc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	2
3	Oc .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	3
4	Chuen .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	4
5	Eb .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	5
6	Ben .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	6
7	Ix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	7
8	Men .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	8
9	Cib .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	9
10	Caban .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	10
11	Ezenab .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	11
12	Cauac .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	12
13	Ahau .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	13
14	Ymix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	14
15	Ik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	15
16	Akbal .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	16
17	Kan .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	17
18	Chicchan ...	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	18
19	Cimi .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	19



ARCHAIC ANNUAL CALENDAR.

35TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	20
1	Ben .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	1
2	Ix .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	2
3	Men .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	3
4	Cib .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	4
5	Caban .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	5
6	Ezenab .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	6
7	Cauac .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	7
8	Ahau .....	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	...	8
9	Ymix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	9
10	Ik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	10
11	Akbal .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	11
12	Kan .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	12
13	Chicchan ...	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	13
14	Cimi .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	14
15	Manik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	15
16	Lamat .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	16
17	Muluc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	17
18	Oc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	18
19	Chuen .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	19

36TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	20
1	Ezenab .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1
2	Cauac .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2
3	Ahau .....	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	3
4	Ymix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4
5	Ik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	5
6	Akbal .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	6
7	Kan .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	7
8	Chicchan ...	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	8
9	Cimi .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	9
10	Manik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	10
11	Lamat .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	11
12	Muluc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	12
13	Oc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	13
14	Chuen .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	14
15	Eb .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	15
16	Ben .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	16
17	Ix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	17
18	Men .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	18
19	Cib .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	19



ARCHAIC ANNUAL CALENDAR.

37TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaskin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	20
1	Akbal .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	1
2	Kan .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	2
3	Chicchan ...	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	3
4	Cimi .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	4
5	Manik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	5
6	Lamat .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	6
7	Muluc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	7
8	Oc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	8
9	Chuen .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	9
10	Eb .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	10
11	Ben .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	11
12	Ix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	12
13	Men .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	13
14	Cib .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	14
15	Caban .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	15
16	Ezenab .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	16
17	Cauac .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	17
18	Ahau .....	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	...	18
19	Ymix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	19

38TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaskin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	20
1	Lamat .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	1
2	Muluc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	2
3	Oc .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	3
4	Chuen .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	4
5	Eb .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	5
6	Ben .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	6
7	Ix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	7
8	Men .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	8
9	Cib .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	9
10	Caban .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	10
11	Ezenab .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	11
12	Cauac .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	12
13	Ahau .....	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	...	13
14	Ymix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	14
15	Ik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	15
16	Akbal .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	16
17	Kan .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	17
18	Chicchan ...	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	18
19	Cimi .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	19

ARCHAIC ANNUAL CALENDAR.

39TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	20
1	Ben .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	1
2	Ix .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	2
3	Men .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	3
4	Cib .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	4
5	Caban .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	5
6	Ezenab .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	6
7	Cauac .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	7
8	Ahau .....	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	...	8
9	Ymix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	9
10	Ik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	10
11	Akbal .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	11
12	Kan .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	12
13	Chicchan ...	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	13
14	Cimi .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	14
15	Manik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	15
16	Lamat .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	16
17	Muluc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	17
18	Oc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	18
19	Chuen .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	19

40TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	20
1	Ezenab .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	1
2	Cauac .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	2
3	Ahau .....	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	3
4	Ymix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	4
5	Ik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	5
6	Akbal .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	6
7	Kan .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	7
8	Chicchan ...	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	8
9	Cimi .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	9
10	Manik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	10
11	Lamat .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	11
12	Muluc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	12
13	Oc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	13
14	Chuen .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	14
15	Eb .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	15
16	Ben .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	16
17	Ix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	17
18	Men .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	18
19	Cib .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	19

ARCHAIC ANNUAL CALENDAR.

41ST YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cunhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	20
1	Akbal .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	1
2	Kan .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	2
3	Chicchan ...	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	3
4	Cimi .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	4
5	Manik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	5
6	Lamat .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	6
7	Muluc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	7
8	Oc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	8
9	Chuen .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	9
10	Eb .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	10
11	Ben .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	11
12	Ix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	12
13	Men .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	13
14	Cib .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	14
15	Caban .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	15
16	Ezenab .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	16
17	Cauac .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	17
18	Ahau .....	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	...	18
19	Ymix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	19

42ND YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cunhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	20
1	Lamat .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	1
2	Muluc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	2
3	Oc .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	3
4	Chuen .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	4
5	Eb .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	5
6	Ben .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	6
7	Ix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	7
8	Men .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	8
9	Cib .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	9
10	Caban .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	10
11	Ezenab .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	11
12	Cauac .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	12
13	Ahau .....	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	...	13
14	Ymix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	14
15	Ik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	15
16	Akbal .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	16
17	Kan .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	17
18	Chicchan ...	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	18
19	Cimi .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	19



ARCHAIC ANNUAL CALENDAR.

43RD YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yarkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	20
1	Ben .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	1
2	Ix .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	2
3	Men .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	3
4	Cib .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	4
5	Caban .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	5
6	Ezenab .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	6
7	Cauac .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	7
8	Ahau .....	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	...	8
9	Ymix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	9
10	Ik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	10
11	Akbal .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	11
12	Kan .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	12
13	Chicchan ...	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	13
14	Cimi .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	14
15	Manik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	15
16	Lamat .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	16
17	Muluc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	17
18	Oc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	18
19	Chuen .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	19

44TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yarkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	20
1	Ezenab .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	1
2	Cauac .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	2
3	Ahau .....	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	3
4	Ymix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	4
5	Ik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	5
6	Akbal .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	6
7	Kan .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	7
8	Chicchan ...	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	8
9	Cimi .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	9
10	Manik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	10
11	Lamat .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	11
12	Muluc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	12
13	Oc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	13
14	Chuen .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	14
15	Eb .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	15
16	Ben .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	16
17	Ix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	17
18	Men .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	18
19	Cib .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	19



ARCHAIC ANNUAL CALENDAR.

45TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	20
1	Akbal .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	1
2	Kan .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	2
3	Chicchan ...	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	3
4	Cimi .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	4
5	Manik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	5
6	Lamat .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	6
7	Muluc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	7
8	Oc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	8
9	Chuen .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	9
10	Eb .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	10
11	Ben .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	11
12	Ix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	12
13	Men .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	13
14	Cib .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	14
15	Caban .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	15
16	Ezenab .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	16
17	Cauac .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	17
18	Ahau .....	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	...	18
19	Ymix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	19

46TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	20
1	Lamat .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	1
2	Muluc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	2
3	Oc .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	3
4	Chuen .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	4
5	Eb .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	5
6	Ben .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	6
7	Ix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	7
8	Men .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	8
9	Cib .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	9
10	Caban .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	10
11	Ezenab .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	11
12	Cauac .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	12
13	Ahau .....	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	...	13
14	Ymix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	14
15	Ik ..	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	15
16	Akbal .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	16
17	Kan .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	17
18	Chicchan ...	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	18
19	Cimi .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	19

ARCHAIC ANNUAL CALENDAR.

47TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eb .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	20
1	Ben .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	1
2	Ix .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	2
3	Men .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	3
4	Cib .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	4
5	Caban .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	5
6	Ezenab .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	6
7	Cauac .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	7
8	Ahau .....	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	...	8
9	Ymix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	9
10	Ik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	10
11	Akbal .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	11
12	Kan .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	12
13	Chicchan ...	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	13
14	Cimi .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	14
15	Manik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	15
16	Lamat .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	16
17	Muluc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	17
18	Oc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	18
19	Chuen .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	19

48TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	20
1	Ezenab .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	1
2	Cauac .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	2
3	Ahau .....	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	3
4	Ymix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	4
5	Ik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	5
6	Akbal .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	6
7	Kan .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	7
8	Chicchan ...	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	8
9	Cimi .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	9
10	Manik .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	10
11	Lamat .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	11
12	Muluc .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	12
13	Oc .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	13
14	Chuen .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	14
15	Eb .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	15
16	Ben .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	16
17	Ix .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	17
18	Men .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	18
19	Cib .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	19

ARCHAIC ANNUAL CALENDAR.

49TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzac.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Ik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	20
1	Akbal .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1
2	Kan .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2
3	Chicchan ...	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3
4	Cimi .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4
5	Manik .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	5
6	Lamat .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	6
7	Muluc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	7
8	Oc .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	8
9	Chuen .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	9
10	Eb .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	10
11	Ben .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	11
12	Ix .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	12
13	Men .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	13
14	Cib .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	14
15	Caban .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	15
16	Ezenab .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	16
17	Cauac .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	17
18	Ahau .....	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	...	18
19	Ymix .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	19

50TH YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzac.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Manik .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	20
1	Lamat .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	1
2	Muluc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	2
3	Oc .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	3
4	Chuen .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	4
5	Eb .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	5
6	Ben .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	6
7	Ix .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	7
8	Men .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	8
9	Cib .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	9
10	Caban .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	10
11	Ezenab .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	11
12	Cauac .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	12
13	Ahau .....	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	...	13
14	Ymix .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	14
15	Ik .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	15
16	Akbal .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	16
17	Kan .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	17
18	Chicchan ...	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	18
19	Cimi .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	19



ARCHAIC ANNUAL CALENDAR.

51st YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Eh .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	20
1	Ben .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	1
2	Ix .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	2
3	Men .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	3
4	Cib.....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	4
5	Caban .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	5
6	Ezenab .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	6
7	Cauac.....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	7
8	Ahau .....	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	...	8
9	Ymix .....	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	9
10	Ik .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	10
11	Akhal .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	11
12	Kan .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	12
13	Chicchan ...	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	13
14	Cimi .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	14
15	Manik .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	15
16	Lamat .....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	16
17	Muluc .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	17
18	Oc .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	18
19	Chuen .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	19

52nd YEAR.

	Names of the months.	Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.	Uayeb.	
	<i>Names of the days.</i>																				
20	Caban .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	20
1	Ezenab .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	1
2	Cauac.....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	2
3	Ahau .....	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>13</b>	<b>7</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>4</b>	<b>11</b>	<b>5</b>	<b>12</b>	3
4	Ymix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	4
5	Ik .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	5
6	Akbal .....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	6
7	Kan .....	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	...	7
8	Chicchan ...	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	...	8
9	Cimi .....	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	...	9
10	Manik .....	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	...	10
11	Lamat .....	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	...	11
12	Muluc .....	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	...	12
13	Oc .....	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	...	13
14	Chuen .....	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	...	14
15	Eb.....	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	...	15
16	Ben .....	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	...	16
17	Ix .....	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	...	17
18	Men .....	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	...	18
19	Cib.....	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	...	19





## ARCHAIC CHRONOLOGICAL CALENDAR.

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THE chronological calendar is the Maya method of reckoning time by ahaus, katuns and cycles. The following tables cover only three out of the seventy-three great cycles constituting the Archaic grand period, they being the only ones to which the dates of the inscriptions relate. Any one desirous of going beyond the range of these three great cycles can readily do so by means of the perpetual calendar appended.

Each table—the size of which unfortunately necessitates its separation into two parts—embraces a cycle, appropriately numbered at the extreme upper corners of the two pages. The great cycle to which it belongs is shown by the running head above the tables. The katun numbers are indicated by the figures over the columns; the ahau numbers by the vertical rows of italic figures in the center and at the margins.

Every single date denotes an ahau, or 360 days; every column of ahaus, a katun, or 7,200 days; every aggregate of the katun columns, a cycle, or 144,000 days; every thirteen cycles, a great cycle, or 1,872,000 days. The ahaus and katuns are numerated: 20, 1, 2, 3, etc., up to 19; the cycles, 13, 1, 2, etc., to 12. The reason for this peculiar style of numeration is given in a preceding section. In the inscriptions the great cycles are designated by composite signs about whose significance there may be some question, so I have simply numbered the three here given 53rd, 54th and 55th, in accordance with my theory of their position in the grand era. As the reasons for that theory are given fully elsewhere, it is unnecessary to repeat them here.

FIFTY-THIRD GREAT CYCLE.

13TH CYCLE.]

	20			1			2			3			4			5			6			7			8			9			
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	4	8	Zotz.	2	13	Kayab.	13	13	Ceh.	11	13	Yaxkin.	9	13	Uo.	7	18	Muan.	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	12	3	Kankin.	20
1	13	3	"	11	8	"	9	8	"	7	8	"	5	8	"	1	13	"	1	13	"	12	13	"	10	18	Cumhu.	8	18	Mac.	1
2	9	18	Zip.	7	3	"	5	3	"	3	3	"	1	3	"	2	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2
3	5	13	"	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	3
4	1	8	"	12	13	"	10	13	"	9	13	"	6	13	"	4	18	Kankin.	2	18	Cen.	13	18	Zotz.	11	3	"	9	3	"	4
5	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	5	13	"	11	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	5
6	6	18	Uo.	4	3	"	13	3	"	13	3	"	11	3	"	6	9	"	7	8	"	3	8	"	5	8	"	3	13	"	6
7	2	13	"	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.	5	3	"	3	3	"	10	18	Zip.	8	3	"	12	8	"	7
8	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Cumhu.	1	18	Mac.	12	18	Mol.	10	18	"	4	18	Pax.	2	18	Zac.	8
9	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	2	8	"	11	13	"	9
10	3	18	Pop.	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	10
11	12	13	"	10	18	Kankin.	8	18	Cen.	6	18	Zotz.	4	3	"	11	2	"	13	3	"	11	3	"	9	8	"	7	8	"	11
12	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"	12
13	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	12	13	Muan.	12	18	Yax.	13
14	13	3	Uayeb.	11	3	"	9	3	"	7	3	"	5	8	"	10	3	"	1	8	"	12	8	"	10	13	"	8	13	"	14
15	9	18	Cumhu.	7	18	Mac.	5	18	Mol.	3	18	Zip.	1	3	"	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	15
16	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Pax.	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	13	3	"	16
17	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	6	13	"	2	13	"	13	13	"	11	18	Kankin.	9	18	Cen.	17
18	10	3	"	8	3	"	6	3	"	4	3	"	2	8	"	11	8	"	11	8	"	9	8	"	7	13	"	5	13	"	18
19	6	18	Kayab.	4	18	Ceh.	2	18	Yaxkin.	13	18	Uo.	11	3	"	7	3	"	7	3	"	5	3	"	3	8	"	3	8	"	19

13TH CYCLE.] FIFTY-THIRD GREAT CYCLE.

10				11			12			13			14			15			16			17			18			19		
No. of the day Ahau.		Day of the month.		Name of month.		No. of the day Ahau.		Day of the month.		Name of month.		No. of the day Ahau.		Day of the month.		Name of month.		No. of the day Ahau.		Day of the month.		Name of month.		No. of the day Ahau.		Day of the month.		Name of month.		
20	10	3	Chen.	8	3	Zotz.	6	8	Kayab.	4	8	Ceh.	2	8	Yaxkin.	13	8	Uo.	11	13	Muan.	9	13	Yax.	7	13	Tzec.	5	18	Cumhu.
1	6	18	Mol.	4	18	Zip.	2	3	"	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	13	"
2	2	13	"	13	13	"	11	18	Pax.	9	18	Zac.	7	18	Xul.	5	18	Pop.	3	3	"	1	3	"	12	3	"	10	8	"
3	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	3	13	"	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"
4	7	3	"	5	3	"	12	8	"	1	8	"	12	8	"	4	8	"	10	8	"	6	13	"	6	13	"	2	18	Kayab.
5	3	18	Yaxkin.	1	18	Uo.	8	3	"	10	3	"	8	3	"	6	3	"	4	3	"	2	3	"	11	3	"	7	8	"
6	12	13	"	10	13	"	4	18	Muan.	6	18	Yax.	13	13	Tzec.	11	18	Uayeb.	13	3	"	13	3	"	7	3	"	9	8	"
7	8	8	"	6	8	"	13	8	"	2	13	"	9	8	"	5	13	"	3	8	"	3	8	"	1	13	"	12	18	Pax.
8	4	3	"	2	3	"	11	3	"	7	3	"	5	3	"	1	8	"	10	3	"	8	3	"	6	3	"	4	8	"
9	13	18	Xul.	11	18	Pop.	9	3	"	13	3	"	7	3	"	3	18	Chen.	12	3	"	12	3	"	10	8	"	8	13	"
10	9	13	"	7	13	"	5	18	Kankin.	3	18	"	1	18	Zotz.	10	13	"	8	18	Ceh.	6	18	Yaxkin.	2	18	"	13	3	"
11	5	8	"	3	8	"	1	13	"	12	13	"	6	8	"	10	13	"	4	13	"	13	13	"	4	18	Uo.	13	3	"
12	1	3	"	12	3	"	10	8	"	8	8	"	6	3	"	6	8	"	2	3	"	2	3	"	7	8	"	5	13	"
13	10	18	Tzec.	8	3	Uayeb.	6	3	"	11	18	Mol.	2	18	Zip.	11	18	"	7	3	"	7	3	"	5	3	"	1	8	"
14	6	13	"	4	18	Cumhu.	2	18	Mac.	13	18	"	13	18	"	3	18	"	3	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"
15	2	8	"	11	13	"	11	13	"	7	8	"	9	8	"	12	13	"	5	18	Pax.	10	13	"	6	18	"	8	13	"
16	11	3	"	9	3	"	3	8	"	5	8	"	12	3	"	4	8	"	1	13	"	10	13	"	4	8	"	2	13	"
17	7	18	Zotz.	3	18	"	7	18	"	5	18	"	12	8	"	1	18	"	10	18	"	6	18	"	4	8	"	2	13	"
18	3	13	"	1	13	"	8	13	"	6	13	"	10	13	"	3	13	"	8	13	"	4	13	"	13	13	"	11	8	"
19	12	8	"	10	8	"	4	13	"	6	13	"	8	13	"	4	13	"	2	18	Yax.	11	18	Tzec.	9	3	Uayeb.	7	3	"



1ST CYCLE.] FIFTY-THIRD GREAT CYCLE.

	20			1			2			3			4			5			6			7			8			9			
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	3	18	Mac.	1	18	Mol.	12	18	Zip.	10	3	Kayab.	8	3	Ceh.	6	3	Yaxkin.	4	3	Uo.	2	8	Muan.	13	8	Yax.	11	8	Tzec.	20
1	12	13	"	10	13	"	8	13	"	6	18	Pax.	4	18	Zac.	13	18	Xul.	13	18	Pop.	11	3	"	9	3	"	7	3	"	1
2	8	8	"	6	8	"	2	8	"	2	13	"	13	13	"	11	8	"	9	13	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	2
3	4	3	"	2	3	"	13	3	"	13	3	"	11	8	"	7	8	"	3	13	"	3	13	"	1	13	"	12	13	"	3
4	13	18	Ceh.	11	18	Yaxkin.	7	13	"	9	18	Uo.	7	3	"	5	3	"	5	3	"	12	8	"	10	8	"	8	8	"	4
5	9	13	"	3	8	"	1	8	"	10	13	"	12	13	"	8	13	"	6	18	Uayeb.	4	18	Mac.	2	18	Mol.	13	18	Zip.	6
6	5	8	"	3	8	"	10	3	"	6	18	Cumhu.	2	13	"	4	8	"	11	8	"	13	13	"	7	8	"	5	8	"	7
7	1	3	"	12	3	"	6	18	Pop.	10	3	"	4	3	"	13	3	"	2	3	"	9	8	"	7	8	"	3	3	"	8
8	10	18	Zac.	8	18	Xul.	6	18	"	13	18	Kankin.	13	18	Chen.	9	13	"	7	13	"	5	3	"	3	3	"	1	3	"	9
9	6	13	"	4	13	"	13	13	"	9	18	"	5	8	"	10	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	10
10	2	8	"	13	8	"	11	8	"	11	8	"	9	13	"	7	13	"	12	13	"	10	13	"	8	13	"	6	13	"	11
11	11	3	"	9	3	"	7	3	"	3	18	"	5	8	"	12	3	"	8	8	"	6	8	"	4	8	"	2	8	"	12
12	7	18	Yax.	5	18	Tzec.	3	3	Uayeb.	10	18	Mac.	12	18	Mol.	6	18	Zip.	4	3	"	8	3	"	13	3	"	11	3	"	13
13	3	13	"	1	13	"	12	18	Cumhu.	8	13	"	6	13	"	4	13	"	3	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.	14
14	12	8	"	10	8	"	4	8	"	2	8	"	13	8	"	7	13	"	5	13	"	7	13	"	5	13	"	3	13	"	15
15	8	3	"	6	3	"	2	3	"	11	3	"	2	8	"	13	8	"	9	3	"	3	8	"	1	8	"	12	8	"	16
16	4	18	Chen.	2	18	Zotz.	13	18	"	9	18	Kayab.	7	18	Yaxkin.	11	3	"	5	18	"	10	3	"	12	3	"	8	3	"	17
17	13	13	"	11	13	"	9	13	"	3	13	"	7	13	"	3	13	"	1	3	"	10	3	"	12	3	"	6	3	"	18
18	9	8	"	7	8	"	5	13	"	3	13	"	3	13	"	12	13	"	10	18	Muan.	8	18	Yax.	6	18	Tzec.	4	3	Uayeb.	18
19	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Cumhu.	19

1ST CYCLE.] FIFTY-THIRD GREAT CYCLE.

10			11			12			13			14			15			16			17			18			19				
	10		Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.				
	No. of the day Aban.	Day of the month.																										No. of the day Aban.	Day of the month.	No. of the day Aban.	Day of the month.
20	9	13	Cumhu.	7	13	Mol.	5	13	Zip.	3	13	Zip.	1	18	Pax.	12	18	Zac.	10	18	Xul.	8	18	Pop.	6	3	Muan.	4	3	Yax.	20
1	5	8	"	3	8	"	1	8	"	10	13	"	10	13	"	8	13	"	6	13	"	4	13	"	2	18	Kankin.	13	18	Chen.	1
2	1	3	"	12	3	"	10	3	"	6	8	"	6	8	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	2
3	10	18	Kayab.	8	18	Ceh.	6	18	Uo.	4	18	Uo.	2	3	"	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3
4	6	13	"	4	13	"	2	13	"	11	18	Muan.	11	18	"	9	18	Yax.	7	18	Tzec.	5	3	Uayeb.	3	3	"	1	3	"	4
5	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Cumhu.	12	18	Mac.	10	18	Mol.	5
6	11	3	"	7	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	6	13	"	6	13	"	6
7	7	18	Pax.	5	18	Zac.	3	18	Pop.	1	18	Pop.	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	7
8	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Kankin.	6	18	Chen.	4	18	Zotz.	2	3	"	13	3	"	11	3	"	8
9	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	9	13	Kayab.	9	18	Ceh.	7	18	Yaxkin.	9
10	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	10
11	4	18	Muan.	2	18	Yax.	13	18	Uayeb.	11	3	Uayeb.	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	11
12	13	13	"	11	13	"	9	13	"	7	18	Cumhu.	5	18	Mac.	3	18	Mol.	1	18	Zip.	12	3	"	10	3	"	8	3	"	12
13	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	10	13	"	6	18	Pax.	6	18	Zac.	4	18	Xul.	13
14	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	8	"	2	13	"	4	13	"	13	13	"	14
15	1	18	Kankin.	10	18	Zotz.	10	18	"	8	3	"	6	3	"	4	3	"	2	3	"	11	8	"	13	8	"	9	8	"	15
16	10	13	"	6	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	11	18	Uo.	9	3	"	7	3	"	5	3	"	16
17	6	8	"	4	8	"	2	8	"	11	13	"	11	13	"	9	13	"	7	13	"	5	18	Muan.	3	18	Yax.	1	18	Tzec.	17
18	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	18
19	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	19

ARCHAIC CHRONOLOGICAL CALENDAR.

FIFTY-THIRD GREAT CYCLE.

2ND CYCLE.]

20				1			2			3			4			5			6			7			8			9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Name of month.		No. of the day Ahan.	Day of the month.	Name of month.	Day of the month.	No. of the day Ahan.	Day of the month.	Name of month.	Day of the month.	No. of the day Ahan.	Day of the month.	Name of month.	Day of the month.	No. of the day Ahan.	Day of the month.	Name of month.	Day of the month.	No. of the day Ahan.	Day of the month.	Name of month.	Day of the month.	No. of the day Ahan.	Day of the month.	Name of month.	Day of the month.	No. of the day Ahan.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															



FIFTY-THIRD GREAT CYCLE.

2ND CYCLE.]

10			11			12			13			14			15			16			17			18			19				
	10		Name of month.	11		Name of month.	12		Name of month.	13		Name of month.	14		Name of month.	15		Name of month.	16		Name of month.	17		Name of month.	18		Name of month.	19			
	No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.	No. of the day Ahau.	Day of the month.
20	8	18	Chen.	6	18	Zotz.	4	3	Cumhu.	2	3	Mac.	13	3	Mol.	11	3	Zip.	9	8	Pax.	7	8	Zac.	5	8	Xul.	3	8	Pop.	20
1	4	13	"	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"	1	3	"	12	3	"	1
2	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	3	Uayeb.	2
3	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	18	Cumhu.	3
4	5	18	Mol.	3	18	Zip.	1	3	"	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	13	"	4
5	1	13	"	12	13	"	10	18	Pax.	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	13	3	"	11	3	"	9	8	"	5
6	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	5	3	"	6
7	6	3	"	4	3	"	13	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Kayab.	7
8	2	18	Yaxkin.	13	18	Uo.	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	8
9	11	13	"	9	13	"	7	18	Muan.	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	12	3	"	10	3	"	8	3	"	6	8	"	9
10	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	4	18	Zip.	2	3	"	10
11	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	11	8	"	9	8	"	13	13	"	11
12	12	18	Xul.	10	18	Pop.	8	3	"	3	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	12
13	8	13	"	6	13	"	2	18	Kankin.	2	18	Chen.	13	18	Zotz.	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	13
14	4	8	"	2	8	"	11	13	"	7	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"	14
15	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	12	13	"	1	13	"	12	13	"	10	13	"	8	18	Muan.	15
16	9	18	Tzec.	7	18	Uayeb.	5	3	"	3	3	"	1	3	"	8	8	"	10	8	"	8	8	"	6	8	"	4	13	"	16
17	5	13	"	3	13	"	12	18	Mac.	12	18	Mol.	10	18	Zip.	6	3	"	6	3	"	4	3	"	2	3	"	13	8	"	17
18	1	8	"	12	8	"	8	13	"	6	13	"	4	13	"	13	13	"	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"	18
19	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	9	13	"	11	13	"	9	13	"	7	13	"	5	18	Kankin.	19



20	1			2			3			4			5			6			7			8			9					
	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.						
20	1	13	Kankin.	12	13	Chen.	10	13	Zotz.	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	Pax.	11	3	Zac.	9	3	Xul.
1	10	8	"	8	8	"	6	8	"	2	13	"	2	13	"	13	13	"	11	13	"	5	18	Yax.	7	18	Yax.	5	18	Tzec.
2	6	3	"	4	3	"	13	8	"	11	8	"	11	8	"	9	8	"	7	8	"	3	13	"	3	13	"	1	13	"
3	2	18	Mac.	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	5	3	"	3	3	"	10	8	"	12	8	"	6	8	"
4	11	13	"	9	13	"	7	13	"	5	18	Pax.	3	18	Zac.	1	18	Xul.	12	18	Pop.	8	3	"	10	3	"	2	3	"
5	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	8	13	"	6	18	Kankin.	4	18	Chen.	2	18	Zotz.
6	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	4	8	"	13	3	"	2	13	"	11	13	"
7	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	4	13	"	2	13	Yax.	7	18	Tzec.	5	18	Cumhu.	3	18	Mac.	1	18	Mol.	12	18	Zip.
8	8	13	"	6	13	"	4	13	"	11	13	"	9	13	"	11	13	"	10	13	"	8	13	"	6	13	"	5	13	"
9	4	8	"	2	8	"	13	8	"	7	8	"	5	8	"	1	8	"	10	8	"	3	8	"	8	8	"	4	8	"
10	13	3	"	11	3	"	9	3	"	5	18	Pop.	3	18	"	12	13	"	10	13	"	12	13	"	8	13	"	4	13	"
11	9	18	Zac.	7	18	Xul.	5	18	Pop.	3	18	"	3	18	"	12	13	"	6	18	"	4	3	"	8	3	"	2	3	"
12	5	13	"	3	13	"	1	13	"	10	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	18	"	4	3	"	2	3	"	9	18	Uo.
13	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Kayab.	13	18	Ceh.	11	18	Yaxkin.	9	18	"
14	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	9	13	"	11	13	"	5	13	"	7	13	"	3	13	"
15	6	18	Yax.	4	18	Tzec.	2	18	Uayeb.	13	3	"	11	3	"	5	3	"	7	8	"	3	8	"	5	8	"	1	8	"
16	2	13	"	13	13	"	11	18	Cunhu.	9	18	Mac.	7	18	Mol.	5	18	Zip.	3	3	"	12	3	"	1	3	"	10	3	"
17	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.
18	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"
19	3	18	Chen.	1	18	Zotz.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	2	8	"	13	8	"

3<sup>RD</sup> CYCLE.]

BIOL. CENTR.-AMER., Archæol.

FIFTY-THIRD GREAT CYCLE.

4TH CYCLE.]

20	1			2			3			4			5			6			7			8			9						
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.							
20	13	18	Tzec.	11	3	Uayeb.	9	3	Kankin.	7	3	Chen.	5	3	Zotz.	3	8	Kayab.	1	8	Ceh.	12	8	Yaxkin.	10	8	Uo.	3	13	Muan.	20
1	9	13	"	7	18	Cumhu.	5	18	Mae.	3	18	Mol.	1	18	Zip.	10	3	"	10	3	"	3	3	"	6	3	"	4	8	"	1
2	5	8	"	3	13	"	1	13	"	10	13	"	6	18	"	2	13	Pax.	6	18	Zac.	4	18	Xul.	2	18	Pop.	13	3	"	2
3	1	3	"	12	8	"	10	8	"	6	8	"	2	3	"	4	13	"	4	13	"	13	13	"	11	13	"	9	18	Kankin.	3
4	10	18	Zotz.	8	3	"	6	3	"	13	3	"	11	8	"	11	8	"	11	8	"	9	8	"	7	8	"	3	13	"	4
5	6	13	"	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	7	3	Uo.	7	3	"	7	3	"	5	3	"	3	3	"	1	8	"	5
6	2	8	"	13	3	"	11	13	"	5	13	"	3	18	"	6	18	Muan.	3	18	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	"	6
7	11	3	"	9	8	"	7	8	"	3	8	"	7	3	"	7	13	"	12	13	"	10	13	"	8	18	Cumhu.	6	18	Mae.	7
8	7	18	Zip.	5	3	"	8	18	"	12	3	"	10	8	"	10	8	"	8	8	"	6	8	"	6	8	"	4	13	"	8
9	3	13	"	1	18	Pax.	12	18	Zac.	10	18	Xul.	6	18	Pop.	8	18	"	4	3	"	2	3	"	13	8	"	11	8	"	9
10	12	8	"	10	13	"	8	13	"	4	13	"	13	18	"	10	18	Kankin.	13	18	Chen.	11	18	Zotz.	9	3	"	7	3	"	10
11	8	3	"	6	8	"	4	8	"	11	8	"	2	8	"	13	8	"	11	13	"	7	13	"	5	18	Kayab.	3	18	Ceh.	11
12	4	18	Uo.	2	3	"	13	3	"	9	3	"	11	3	"	5	8	"	5	8	"	3	8	"	12	13	"	8	8	"	12
13	13	13	"	11	18	Muan.	9	18	Yax.	7	18	Tzec.	7	18	Uayeb.	5	3	"	1	3	"	12	3	"	10	8	"	3	8	"	13
14	9	8	"	7	13	"	5	13	"	12	13	"	3	13	Cumhu.	1	18	Mae.	10	18	Mol.	8	18	Zip.	6	3	"	4	3	"	14
15	5	3	"	3	8	"	1	8	"	8	8	"	12	8	"	10	13	"	6	13	"	4	13	"	2	18	Pax.	13	18	Zac.	15
16	1	18	Pop.	12	3	"	10	3	"	6	3	"	8	3	"	6	8	"	2	8	"	13	8	"	11	13	"	7	8	"	16
17	10	13	"	8	18	Kankin.	6	18	Chen.	4	18	Zotz.	4	18	"	2	3	"	11	3	"	9	3	"	5	8	"	3	8	"	17
18	6	8	"	4	13	"	2	13	"	13	13	"	13	13	Kayab.	11	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	3	3	"	1	3	"	18
19	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	7	13	"	3	13	"	1	13	"	1	13	"	12	18	Yax.	19



10			11			12			13			14			15			16			17			18			19			
No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.				
20	6	Yax.	4	13	Tzec.	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.	7	3	Kayab.	5	3	Ceh.	3	3	Yaxkin.	1	3	Uo.	20
1	2	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	1
2	11	"	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	2
3	7	Chen.	5	18	Zotz.	3	3	"	1	3	"	12	3	"	10	3	"	4	8	"	6	8	"	4	8	"	2	8	"	3
4	3	"	1	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	"	4	3	"	2	3	"	13	3	"	4
5	12	"	8	13	"	10	8	"	6	13	"	4	13	"	2	13	"	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.	5
6	8	"	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Cumhu.	6
7	4	Mol.	2	18	Zip.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	7
8	13	"	11	13	"	7	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.	1	3	"	10	3	"	12	3	"	8	8	"	8
9	9	"	7	8	"	5	13	"	3	13	"	12	13	"	8	13	"	4	13	"	6	18	Chen.	8	18	Zotz.	4	3	"	9
10	5	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Kayab.	10
11	1	Yaxkin.	12	18	Uo.	10	3	"	8	3	"	6	3	"	13	3	Uayeb.	11	3	"	13	8	"	9	3	"	11	8	"	11
12	10	"	8	13	"	6	18	Muan.	4	18	Yax.	2	18	Tzec.	13	3	"	5	18	Mac.	7	18	Mol.	3	18	Zip.	1	3	"	12
13	6	"	4	8	"	2	13	"	13	13	"	11	13	"	9	18	Cumhu.	7	18	"	5	18	"	1	13	"	12	13	Pax.	13
14	2	"	13	3	"	11	8	"	9	8	"	7	8	"	5	13	"	12	8	"	10	8	"	8	8	"	8	13	"	14
15	11	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"	1	8	"	10	3	"	6	3	"	4	3	"	11	3	"	15
16	7	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	8	18	"	4	18	"	6	18	Yaxkin.	13	18	Uo.	2	8	"	16
17	3	"	1	8	"	10	13	"	6	13	"	8	13	"	4	3	"	11	13	"	9	13	"	7	13	"	9	13	"	17
18	12	"	10	3	"	6	8	"	2	8	"	13	8	"	11	8	"	13	13	"	11	13	"	5	8	"	7	18	Muan.	18
19	8	Tzec.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"	7	8	"	9	8	"	7	8	"	5	8	"	3	13	"	19



20			1			2			3			4			5			6			7			8			9		
20	Name of month.		No. of the day Aban.	Day of the month.		Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.		
20	Muan.	8	12	Yax.	8	Tzac.	8	8	Cumhu.	6	13	Mac.	20	2	13	Mol.	13	13	Zip.	11	18	Pax.	9	18	Zac.	7	18	Xul.	
1	"	3	8	"	3	"	4	3	"	2	8	"	1	11	8	"	9	8	"	"	7	13	"	5	13	"	3	13	"
2	Kankin.	18	4	Chen.	18	Zotz.	13	18	"	11	3	"	2	7	3	"	5	3	"	"	3	8	"	1	8	"	12	8	"
3	"	13	13	"	13	"	9	13	Kayab.	7	18	Ceh.	3	3	18	Yaxkin.	1	18	Uo.	12	3	"	10	3	"	8	3	"	3
4	"	8	9	"	8	"	5	8	"	3	13	"	4	12	13	"	10	13	"	8	18	Muan.	6	18	Yax.	4	18	Tzac.	
5	"	3	5	"	3	"	1	3	"	12	8	"	5	8	8	"	6	8	"	"	4	13	"	2	13	"	13	13	"
6	Mac.	18	1	Mol.	18	Zip.	10	18	"	8	3	"	6	4	3	"	2	3	"	"	13	8	"	11	8	"	9	8	"
7	"	13	10	"	13	"	6	13	Pax.	4	18	Zac.	7	13	18	Xul.	11	18	Pop.	5	18	Kankin.	3	18	Chen.	1	18	Zotz.	
8	"	8	6	"	8	"	13	8	"	13	13	"	8	9	13	"	7	13	"	"	1	13	"	12	13	"	10	13	"
9	"	3	13	"	3	"	9	3	"	5	3	"	9	5	8	"	3	8	"	"	10	8	"	8	8	"	6	8	"
10	Ceh.	18	11	Yaxkin.	18	Uo.	7	18	"	1	18	Yax.	10	1	3	"	12	3	"	"	6	3	"	4	3	"	2	3	"
11	"	13	7	"	13	"	3	13	Muan.	12	18	"	11	10	18	Tzac.	3	18	Uayeb.	3	18	Mac.	13	18	Mol.	11	18	Zip.	
12	"	8	3	"	8	"	10	8	"	6	8	"	12	6	13	"	4	18	Cumhu.	2	18	"	13	18	"	7	13	"	
13	"	3	12	"	3	"	8	3	"	4	8	"	13	11	3	"	9	8	"	"	7	8	"	5	8	"	3	8	"
14	Zac.	18	8	Xul.	18	Pop.	4	18	"	2	3	"	14	11	3	"	5	3	"	"	3	3	"	1	3	"	12	3	"
15	"	13	4	"	13	"	13	13	Kankin.	11	18	Chen.	15	7	18	Zotz.	5	3	"	"	3	3	"	1	3	"	12	3	"
16	"	8	13	"	8	"	7	8	"	5	13	"	16	3	13	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	
17	"	3	9	"	3	"	3	3	"	1	8	"	17	12	8	"	10	13	"	"	8	13	"	6	13	"	4	13	"
18	Yax.	18	5	Tzac.	18	Uayeb.	12	3	"	10	3	"	18	8	3	"	6	8	"	"	4	8	"	2	8	"	13	8	"
19	"	13	1	"	13	Cumhu.	8	18	Mac.	6	18	Mol.	19	4	18	Zip.	2	3	"	"	13	3	"	11	3	"	9	3	"

FIFTY-THIRD GREAT CYCLE.

5TH CYCLE.]

10			11			12			13			14			15			16			17			18			19		
	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.		
	Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.	
20	5	18	Pop.	3	Muan.	1	3	Yax.	12	3	Tzec.	10	8	Cumhu.	8	8	Mac.	6	8	Mol.	4	8	Zip.	2	13	Pax.	13	13	Zac.
1	1	13	"	12	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	2	3	"	2	3	"	13	3	"	11	8	"	9	8	"
2	10	8	"	8	"	6	13	"	4	13	"	2	18	Kayab.	18	13	Ceh.	11	18	Yaxkin.	9	18	Uo.	7	3	"	5	3	"
3	6	3	"	4	"	2	8	"	13	8	"	11	13	"	3	8	"	7	13	"	5	13	"	3	18	Muan.	1	18	Yax.
4	2	3	Uayeb.	13	"	11	3	"	9	3	"	7	8	"	3	8	"	3	8	"	1	8	"	12	13	"	10	13	"
5	11	18	Cumhu.	9	Mac.	7	18	Mol.	5	18	Zip.	3	3	"	12	3	"	12	3	"	6	18	Pop.	2	13	"	4	3	"
6	7	13	"	5	"	3	13	"	1	13	"	8	18	Pax.	18	13	Zac.	8	18	Xul.	6	18	"	13	18	Kankin.	11	18	Chen.
7	3	8	"	1	"	12	8	"	10	8	"	3	8	"	8	8	"	4	8	"	11	8	"	9	13	"	7	13	"
8	12	3	"	10	"	8	3	"	6	3	"	4	8	"	13	3	"	9	3	"	7	3	"	5	8	"	3	8	"
9	8	18	Kayab.	6	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	9	3	"	5	18	Tzec.	3	3	Uayeb.	1	3	"	12	3	"
10	4	13	"	2	"	13	13	"	11	13	"	9	18	Muan.	18	13	Yax.	5	18	"	12	18	Cumhu.	10	18	Mac.	8	18	Mol.
11	13	8	"	11	"	9	8	"	7	8	"	5	13	"	3	13	"	10	8	"	6	13	"	8	13	"	4	13	"
12	9	3	"	7	"	5	3	"	3	3	"	1	8	"	12	8	"	6	8	"	4	8	"	2	8	"	13	8	"
13	5	18	Pax.	3	Zac.	1	18	Xul.	12	18	Pop.	10	3	"	8	3	Chen.	2	18	Zotz.	13	3	"	11	3	"	9	3	"
14	1	13	"	12	"	10	13	"	8	13	"	6	18	Kankin.	18	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.
15	10	8	"	8	"	6	8	"	4	8	"	2	13	"	11	8	"	7	8	"	5	13	"	3	13	"	1	13	"
16	6	3	"	4	"	2	3	"	13	3	"	11	8	"	7	8	"	3	8	"	1	8	"	5	13	"	10	8	"
17	2	18	Muan.	13	Yax.	11	18	Tzec.	9	3	Uayeb.	7	3	"	13	3	"	3	3	"	1	8	"	10	8	"	6	3	"
18	11	13	"	9	"	7	13	"	5	18	Cumhu.	3	18	Mac.	18	13	Mol.	12	18	"	10	3	"	8	3	"	4	3	"
19	7	8	"	5	"	3	8	"	1	13	"	12	13	"	8	13	"	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.

20				1			2			3			4			5			6			7			8			9				
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.			
20	11	13	Xul.	9	13	Pop.	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	20	1	12	Cumhu.	12	3	Mac.	10	3	Mol.	8	3	Zip.	6	8	Pax.	20
1	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	1	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	3	"	1
2	3	3	"	1	3	"	12	8	"	10	8	"	9	8	"	2	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Muan.	2
3	12	18	Tzec.	10	3	Uayeb.	8	3	"	6	3	"	4	3	"	3	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	3
4	8	13	"	6	18	Cumhu.	4	18	Mac.	2	18	Mol.	13	18	Zip.	4	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	4
5	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	5	7	18	Pax.	5	18	Zac.	3	18	Xul.	1	18	Pop.	12	3	"	5
6	13	3	"	11	8	"	7	8	"	7	8	"	5	8	"	6	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Kankin.	6
7	9	18	Zotz.	7	3	"	5	3	"	3	3	"	1	3	"	7	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	7
8	5	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	8	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	8
9	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	9	4	18	Muan.	2	18	Yax.	13	18	Tzec.	11	3	Uayeb.	9	3	"	9
10	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	10	13	13	"	11	13	"	9	13	"	7	18	Cumhu.	5	18	Mac.	10
11	6	18	Zip.	4	3	"	2	3	"	11	3	"	11	3	"	11	9	8	"	7	8	"	5	8	"	12	8	"	10	13	"	11
12	2	13	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.	12	5	3	"	3	3	"	1	3	"	10	8	"	8	18	"	12
13	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	13	1	18	Kankin.	12	18	Chen.	10	18	Zotz.	8	3	"	6	18	Kayab.	13
14	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	14	10	13	"	8	13	"	6	13	"	4	18	"	2	18	Ceh.	14
15	3	18	Uo.	1	3	"	12	3	"	10	3	"	8	3	"	15	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	15
16	12	13	"	10	18	Muan.	8	18	Yax.	6	18	Tzec.	4	3	Uayeb.	16	13	3	"	13	3	"	11	3	"	9	8	"	7	8	"	16
17	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Cumhu.	17	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	18	"	17
18	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	18	7	13	"	5	13	"	3	13	"	1	18	Pax.	12	18	Zac.	18
19	13	18	Pop.	11	3	"	9	3	"	7	3	"	5	8	"	19	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	19



	10			11			12			13			14			15			16			17			18			19		
	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.			
20	4	8	Zac.	2	8	Xul.	13	8	Pop.	11	13	Kankin.	9	13	Chen.	7	13	Zotz.	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	12	18	Uo.
1	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	1	13	"	1	13	"	12	13	"	10	13	"	8	13	"
2	9	18	Yax.	7	18	Tzec.	5	3	Uayeb.	3	3	"	1	3	"	10	8	"	6	8	"	8	8	"	6	8	"	4	8	"
3	5	13	"	3	13	"	1	18	Cumhu.	12	18	Mac.	10	18	Mol.	8	18	Zip.	6	3	"	4	3	"	2	3	"	13	3	"
4	1	8	"	12	8	"	8	13	"	8	13	"	6	13	"	4	13	"	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.
5	10	3	"	8	3	"	4	8	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"
6	6	18	Chen.	4	18	Zotz.	13	3	"	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"
7	2	13	"	13	13	"	7	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	12	18	Muan.	10	18	Yax.	8	18	Tzec.	10	3	"
8	11	8	"	9	8	"	5	13	"	5	13	"	3	13	"	1	13	"	8	13	"	6	13	"	10	13	"	6	3	Uayeb.
9	7	3	"	5	3	"	3	8	"	3	8	"	1	8	"	10	8	"	8	13	"	8	13	"	6	13	"	4	13	Cumhu.
10	3	18	Mol.	1	18	Zip.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	13	8	"	2	8	"	13	8	"
11	12	13	"	10	13	"	8	18	Pax.	6	18	Zac.	4	18	Xul.	2	18	Pop.	13	3	"	9	18	Chen.	11	3	"	7	8	"
12	8	8	"	6	8	"	2	13	"	2	13	"	13	13	"	11	13	"	9	18	Kankin.	7	18	Chen.	5	18	Zotz.	3	3	"
13	4	3	"	2	3	"	11	8	"	7	3	"	9	8	"	3	3	"	7	8	"	12	13	"	10	8	"	8	13	Kayab.
14	13	18	Yaxkin.	11	18	Uo.	9	3	"	5	3	"	1	3	"	10	3	"	10	8	"	12	8	"	10	8	"	4	8	"
15	9	13	"	7	13	"	3	18	Muan.	12	18	Yax.	10	18	Tzec.	8	18	Uayeb.	6	3	"	4	18	Mol.	2	18	Zip.	13	3	"
16	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	6	18	Cumhu.	8	18	Mac.	4	18	Mol.	13	13	"	9	18	Pax.
17	1	3	"	12	3	"	8	8	"	2	8	"	6	8	"	4	13	"	11	13	"	13	13	"	7	8	"	5	13	"
18	10	18	Xul.	8	18	Pop.	6	3	"	4	3	"	2	3	"	11	8	"	13	8	"	9	8	"	7	8	"	3	13	"
19	6	13	"	4	13	"	2	18	Kankin.	13	18	Chen.	11	18	Zotz.	7	3	"	9	3	"	5	3	"	3	3	"	1	8	"



7TH CYCLE.] FIFTY-THIRD GREAT CYCLE.

20				1			2			3			4			5			6			7			8			9		
20	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.
20	10	3	Pax.	8	3	Zac.	6	3	Xul.	4	3	Pop.	2	8	Kankin.	13	8	Chen.	11	8	Zotz.	9	13	Kayab.	7	13	Ceh.	5	13	Yaxkin.
1	6	18	Muan.	4	18	Yax.	2	18	Tzec.	13	18	Uayeb.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"
2	2	13	"	13	13	"	11	13	"	9	18	Cumhu.	7	18	Mac.	3	18	Mol.	3	18	Zip.	1	3	"	12	3	"	10	3	"
3	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	6	18	Pax.	8	18	Zac.	6	18	Xul.
4	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	4	8	"	10	8	"	6	13	"	4	13	"	2	13	"
5	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	10	3	Kayab.	6	3	"	2	3	Yaxkin.	13	3	"	4	8	"	13	8	"	11	8	"
6	12	13	"	10	13	"	8	13	"	6	18	"	4	18	Ceh.	11	13	"	9	13	Uo.	7	18	Muan.	5	18	Yax.	3	18	Tzec.
7	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	"	5	18	"	7	3	"
8	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	5	8	"	7	8	"	3	13	"	12	8	"	12	13	"
9	13	18	Mac.	11	18	Mol.	9	18	Zip.	7	3	"	5	3	"	1	3	"	10	3	"	8	8	"	10	8	"	8	8	"
10	9	13	"	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.	10	18	Xul.	6	18	Pop.	8	3	"	6	3	"	4	3	"
11	5	8	"	3	8	"	1	8	"	10	13	"	6	13	"	2	13	"	8	13	"	4	18	Kankin.	2	18	Chen.	13	18	Zotz.
12	1	3	"	12	3	"	10	3	"	8	8	"	2	8	"	4	8	"	13	8	"	11	13	"	13	13	"	9	13	"
13	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	"	11	18	Yax.	7	18	Tzec.	5	18	Uayeb.	13	3	"	9	3	"	5	3	"
14	6	13	"	4	13	"	2	13	"	13	18	Muan.	11	18	"	3	18	"	11	18	Cumhu.	1	18	Mac.	12	18	Mol.	10	18	Zip.
15	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	12	13	"	5	13	"	10	13	"	8	13	"	6	13	"
16	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	12	8	"	10	8	"	8	13	"	4	8	"	2	8	"
17	7	18	Zac.	5	18	Xul.	3	18	Pop.	1	3	"	12	3	"	6	3	"	10	3	"	4	8	"	6	8	"	2	8	"
18	3	13	"	1	13	"	12	13	"	10	18	Kankin.	8	18	Chen.	4	18	Zotz.	6	18	"	2	3	"	13	3	"	11	3	"
19	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	13	18	"	11	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.

	10			11			12			13			14			15			16			17			18			19			
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.				
20	3	13	Uo.	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	3	Uayeb.	6	3	Kankin.	4	3	Chen.	2	3	Zotz.	13	8	Kayab.	11	8	Ceh.	20
1	12	8	"	10	13	"	8	13	"	6	13	"	4	18	Cumhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	1
2	8	3	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	7	13	"	5	18	Pax.	3	18	Zac.	2
3	4	18	Pop.	2	3	"	13	3	"	11	3	"	9	8	"	3	8	"	5	8	"	3	8	"	1	13	"	12	13	"	3
4	13	13	"	11	18	Kankin.	7	18	Chen.	7	18	Zotz.	5	3	"	4	3	"	1	3	"	12	3	"	10	8	"	8	8	"	4
5	9	8	"	7	13	"	3	13	"	3	13	"	1	18	Kayab.	10	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	6	3	"	4	3	"	5
6	5	3	"	3	8	"	1	8	"	5	13	"	10	13	"	6	13	"	6	13	"	2	18	Muan.	13	18	Yax.	13	18	Yax.	6
7	1	3	Uayeb.	12	3	"	10	3	"	8	3	"	6	8	"	7	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7
8	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	4	18	Zip.	2	3	"	11	3	"	11	3	"	9	3	"	7	8	"	5	8	"	8
9	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Pax.	7	18	Zac.	9	18	Xul.	5	18	Pop.	3	3	"	1	3	"	9
10	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	Kankin.	10	18	Chen.	10
11	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	10	8	"	12	8	"	10	8	"	8	13	"	6	13	"	11
12	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	13	3	"	11	3	"	12
13	3	13	"	1	13	"	8	13	"	10	13	"	8	18	Muan.	13	13	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.	13
14	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	14
15	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	7	13	"	5	8	"	3	8	"	1	8	"	12	8	"	15
16	4	18	Pax.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"	7	13	"	5	3	"	3	8	"	1	8	"	10	3	"	16
17	13	13	"	11	13	"	7	13	"	3	8	"	5	18	Kankin.	12	13	Chen.	1	18	Zotz.	12	3	"	8	18	Ceh.	4	18	Yaxkin.	17
18	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	10	13	"	10	13	"	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	18
19	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	4	8	"	6	8	"	4	13	"	2	13	"	13	13	"	19

ARCHAIC CHRONOLOGICAL CALENDAR.

8TH CYCLE.]

FIFTY-THIRD GREAT CYCLE.

20			1			2			3			4			5			6			7			8			9			
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.			
20	9	8	Yaxkin.	7	8	Uo.	5	13	Muan.	3	13	Yax.	1	13	Tzec.	12	18	Cumhu.	10	18	Mae.	6	18	Mol.	6	18	Zip.	4	3	Kayab.
1	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	6	13	"	6	13	"	2	13	"	4	13	"	13	18	Pax.
2	1	18	Xul.	12	18	Pop.	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	11	8	"	13	8	"	9	13	"
3	10	13	"	8	13	"	6	18	Kankin.	4	18	Chen.	2	18	Zotz.	13	3	"	11	3	"	7	3	"	9	3	"	5	8	"
4	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	7	18	Ceh.	7	18	Ceh.	3	18	Yaxkin.	5	18	Uo.	1	3	"
5	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	3	13	"	3	13	"	12	13	"	1	13	"	10	18	Muan.
6	11	18	Tzec.	9	18	Uayeb.	7	3	"	5	3	"	3	3	"	8	8	"	12	8	"	6	8	"	10	8	"	4	13	"
7	7	13	"	5	18	Cumhu.	3	18	Mae.	1	18	Mol.	12	18	Zip.	6	3	"	10	3	"	8	3	"	6	3	"	4	8	"
8	3	8	"	1	13	"	12	13	"	10	13	"	8	13	"	4	18	Pax.	4	18	Zac.	11	18	Xul.	2	18	Pop.	7	18	Kankin.
9	12	3	"	10	8	"	8	3	"	6	8	"	4	8	"	13	3	"	2	13	"	9	8	"	7	8	"	5	13	"
10	3	18	Zotz.	6	3	"	4	3	"	11	18	Yaxkin.	9	18	Uo.	11	8	"	13	8	"	7	8	"	3	8	"	12	8	"
11	4	13	"	2	18	Kayab.	13	18	Ceh.	7	13	"	5	13	"	5	3	"	3	18	Yax.	12	18	Tzec.	10	3	Uayeb.	8	3	"
12	13	8	"	11	13	"	9	13	"	7	13	"	3	13	"	12	13	"	10	13	"	8	13	"	8	13	"	6	18	Mae.
13	9	3	"	7	8	"	5	8	"	12	3	"	1	8	"	6	8	"	4	8	"	2	13	"	4	8	"	13	13	"
14	5	18	Zip.	3	3	"	1	3	"	14	3	"	10	3	"	4	3	"	4	3	"	11	8	"	11	8	"	9	8	"
15	1	13	"	12	18	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.	2	3	"	13	3	"	9	8	"	7	8	"	5	3	"
16	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	11	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	3	18	"
17	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	7	13	"	7	13	"	5	13	"	3	18	Kayab.	1	18	Ceh.
18	2	18	Uo.	13	3	"	11	3	"	9	3	"	7	3	"	3	8	"	3	8	"	12	13	"	1	8	"	10	13	"
19	11	13	"	9	18	Muan.	7	18	Yax.	5	18	Tzec.	3	3	Uayeb.	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"



10			11			12			13			14			15			16			17			18			19		
	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.		
	Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.	
20	2	Ceh.	13	3	Yaxkin.	11	3	Uo.	9	8	Muan.	7	8	Yax.	5	8	Tzec.	3	13	Cumhu.	1	13	Mac.	12	13	Mol.	10	13	Zip.
1	11	Zac.	9	18	Xul.	7	18	Pop.	5	3	"	3	3	"	12	1	"	10	8	"	8	8	"	6	8	"	6	8	"
2	7	"	5	13	"	3	13	"	1	18	Kankin.	12	18	Chen.	10	18	Zotz.	8	3	"	6	3	"	4	3	"	2	3	"
3	3	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	11	18	Uo.
4	12	"	10	3	"	6	3	"	4	8	"	4	8	"	13	2	"	11	13	"	13	13	"	9	13	"	7	13	"
5	8	Yax.	6	18	Tzec.	4	3	Uayeb.	2	3	"	13	3	"	11	3	"	7	8	"	5	8	"	3	8	"	3	8	"
6	4	"	2	13	"	13	18	Cumhu.	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	1	3	"	1	3	"	12	3	"
7	13	"	11	8	"	7	13	"	5	13	"	5	13	"	3	13	"	1	18	Pax.	12	18	Zac.	10	18	Xul.	8	18	Pop.
8	9	"	7	3	"	3	8	"	1	8	"	1	8	"	12	8	"	8	13	"	8	13	"	6	13	"	4	13	"
9	5	Chen.	3	18	Zotz.	1	3	"	10	3	"	10	3	"	8	3	"	4	8	"	6	8	"	2	8	"	13	8	"
10	1	"	12	13	"	8	18	Kayab.	6	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	3	"	11	3	"	13	3	"	9	3	"
11	10	"	6	8	"	4	13	"	2	13	"	2	13	"	13	13	"	9	18	Muan.	9	18	Yax.	7	18	Tzec.	5	18	"
12	6	"	4	3	"	13	8	"	11	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	3	13	Cumhu.
13	2	Mol.	13	18	Zip.	11	3	"	5	18	Zac.	3	18	Xul.	5	18	Pop.	12	3	"	12	3	"	10	3	"	6	8	"
14	11	"	7	18	Pax.	3	13	"	12	8	"	12	8	"	10	3	"	3	8	"	8	8	"	4	18	Zotz.	2	3	"
15	7	"	3	8	"	10	13	"	1	13	"	8	13	"	6	18	"	6	18	Kankin.	6	18	Chen.	4	18	"	4	18	"
16	3	"	1	3	"	10	8	"	8	8	"	4	13	"	2	13	"	2	13	"	2	13	"	13	13	"	7	13	Kayab.
17	12	Yaxkin.	10	18	Uo.	6	3	"	4	3	"	6	3	"	11	8	"	11	8	"	11	8	"	9	8	"	3	8	"
18	8	"	6	13	"	2	18	Muan.	13	18	Yax.	13	18	Tzec.	11	3	"	9	3	"	13	3	"	7	3	"	5	3	"
19	4	"	2	8	"	11	13	"	9	13	"	9	13	"	7	18	Cumhu.	5	18	Mac.	3	18	Mol.	1	18	Zip.	12	3	"



20			1			2			3			4			5			6			7			8			9		
No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	8	Pax.	6	18	Zac.	4	18	Xul.	2	18	Pop.	13	3	Muan.	11	3	Yax.	9	3	Tzec.	7	8	Cumhu.	5	8	Mac.	3	8	Mol.
1	4	"	2	13	"	13	13	"	11	13	"	9	18	Kankin.	7	18	Chen.	5	18	Zotz.	3	3	"	1	3	"	12	3	"
2	13	"	11	8	"	9	8	"	3	13	"	12	8	"	3	13	"	1	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.
3	9	"	7	3	"	5	3	"	12	3	"	1	8	"	10	8	"	6	8	"	8	13	"	6	13	"	4	13	"
4	5	Muan.	3	18	Yax.	1	18	Tzec.	8	18	Uayeb.	10	3	"	4	3	"	6	3	"	4	8	"	2	8	"	13	8	"
5	1	"	12	13	"	10	13	"	6	13	Cumhu.	6	18	Mac.	13	13	Mol.	11	13	Zip.	9	18	Pax.	7	18	Zac.	5	18	Xul.
6	10	"	8	8	"	4	8	"	13	8	"	2	13	"	7	8	"	11	8	"	5	13	"	3	13	"	1	13	"
7	6	"	4	3	"	2	3	"	11	3	"	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"
8	2	Kankin.	13	18	Chen.	11	18	Zotz.	9	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	12	18	Uo.	10	3	"	8	3	"	6	3	"
9	11	"	9	13	"	5	13	"	1	13	"	12	13	"	10	13	"	8	13	"	6	18	Muan.	4	18	Yax.	2	18	Tzec.
10	7	"	5	8	"	3	8	"	1	8	"	11	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"
11	3	"	1	3	"	12	3	"	10	3	"	8	3	"	13	3	"	9	3	"	7	8	"	9	8	"	3	8	"
12	12	Mac.	10	18	Mol.	6	18	Zip.	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"
13	8	"	6	13	"	4	13	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.
14	4	"	2	8	"	11	8	"	7	8	"	12	8	"	10	8	"	8	8	"	11	8	"	9	8	"	8	8	"
15	13	"	11	3	"	7	3	"	3	3	"	5	3	"	12	3	"	1	3	"	12	13	"	10	13	"	8	13	"
16	9	Ceh.	7	18	Yaxkin.	5	18	Uo.	3	18	Muan.	10	18	Yax.	12	18	Tzec.	6	18	"	4	3	"	8	3	"	2	3	"
17	5	"	3	13	"	1	13	"	8	13	"	6	13	"	4	13	"	10	13	"	13	18	Mac.	11	18	Mol.	9	18	Zip.
18	1	"	12	8	"	10	8	"	8	8	"	4	8	"	11	8	"	2	8	"	9	13	"	7	13	"	5	13	"
19	10	"	8	3	"	6	3	"	4	3	"	2	3	"	13	3	"	11	3	"	9	13	"	7	13	"	5	13	"

FIFTY-THIRD GREAT CYCLE.

9TH CYCLE.]

10			11			12			13			14			15			16			17			18			19			
	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.			
20	1	Zip.	12	13	Pax.	10	13	Zac.	8	13	Xul.	6	13	Pop.	4	18	Kankin.	2	18	Chen.	13	18	Zotz.	11	3	Cumhu.	9	3	Mac.	20
1	10	"	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	1
2	6	Uo.	4	3	"	11	3	"	9	8	"	11	3	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	2
3	2	"	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.	3	3	"	3	3	"	1	3	"	12	8	"	10	8	"	3
4	11	"	9	13	"	5	13	"	5	13	"	3	18	Cumhu.	1	18	Mac.	12	18	Mol.	10	18	Zip.	8	3	"	6	3	"	4
5	7	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Pax.	2	18	Zac.	5
6	3	Pop.	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	6
7	12	"	10	18	Kankin.	8	18	Chen.	6	18	Zotz.	4	3	"	7	3	"	13	3	"	11	3	"	9	8	"	7	8	"	7
8	8	"	6	13	"	4	13	"	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"	8
9	4	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	1	18	Muan.	12	18	Yax.	9
10	13	Uayeb.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	10
11	9	Cumhu.	7	18	Mac.	5	18	Mol.	3	18	Zip.	1	3	"	10	3	"	10	3	"	8	3	"	6	8	"	4	8	"	11
12	5	"	3	13	"	1	13	"	12	13	"	6	18	Pax.	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	11	18	Kankin.	12
13	1	"	12	8	"	8	8	"	3	8	"	2	8	"	13	13	"	11	13	"	2	13	"	13	13	"	9	18	Chen.	13
14	10	"	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	14
15	6	Kayab.	4	18	Ceh.	2	18	Yaxkin.	11	18	Uo.	11	3	"	7	3	"	7	3	"	5	3	"	3	8	"	12	3	"	15
16	2	"	13	13	"	11	13	"	9	13	"	7	18	Muan.	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	10	3	"	12	3	"	16
17	11	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	17
18	7	"	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	18
19	3	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	19

10TH CYCLE.] FIFTY-THIRD GREAT CYCLE.

20	1			2			3			4			5			6			7			8			9					
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.						
20	7	3	Mol.	5	3	Zip.	3	8	Pax.	1	8	Zac.	12	8	Xul.	10	8	Pop.	8	13	Kankin.	6	13	Chen.	4	13	Zotz.	2	18	Kayab.
1	3	18	Yaxkin.	1	18	Uo.	12	3	"	10	3	"	6	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"
2	12	13	"	10	13	"	3	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	13	3	"	11	3	"	9	3	"	7	8	"
3	8	8	"	6	8	"	2	13	"	2	13	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.	5	18	Zip.	3	3	"
4	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	3	13	"	12	18	Pax.
5	13	18	Xul.	11	18	Pop.	9	3	"	7	3	"	5	3	"	6	18	"	1	8	"	10	8	"	12	8	"	8	13	"
6	9	13	"	7	13	"	5	18	Kankin.	3	18	Chen.	1	18	Zotz.	12	3	"	10	3	"	8	3	"	4	3	"	6	8	"
7	5	8	"	3	8	"	12	13	"	8	8	"	6	8	"	4	13	Kayab.	2	13	"	13	13	"	11	13	"	9	18	Muan.
8	1	3	"	12	3	"	10	8	"	6	3	"	2	3	"	11	8	"	7	3	"	3	3	"	5	3	"	1	8	"
9	10	18	Tzec.	8	18	Uayeb.	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	7	8	"	9	8	"	5	13	"
10	6	13	"	4	13	"	2	18	Mac.	13	18	Mol.	11	18	Zip.	9	3	"	3	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"
11	2	8	"	13	8	"	9	13	"	5	8	"	3	8	"	7	13	"	12	13	"	10	13	"	8	13	"	6	18	Kankin.
12	11	3	"	9	3	"	7	8	"	3	3	"	12	3	"	6	8	"	8	8	"	4	8	"	9	8	"	2	13	"
13	7	18	Zotz.	5	18	"	1	3	"	10	18	Yaxkin.	8	18	Uo.	6	3	"	4	3	"	2	3	"	13	3	"	11	8	"
14	3	13	"	1	13	"	12	18	Ceh.	10	18	"	4	13	"	15	18	Muan.	13	18	Yax.	11	18	Tzec.	9	18	Uayeb.	7	3	"
15	12	8	"	10	8	"	6	13	"	2	8	"	13	8	"	16	13	"	9	13	"	7	13	"	5	18	Cumhu.	3	18	Mac.
16	8	3	"	6	8	"	4	8	"	11	3	"	9	3	"	17	8	"	5	8	"	3	8	"	1	13	"	12	13	"
17	4	18	Zip.	2	18	"	13	3	"	7	18	"	5	18	Pop.	1	3	"	1	3	"	12	3	"	10	8	"	8	8	"
18	13	13	"	11	13	"	9	18	Zac.	7	18	Xul.	3	18	"	18	3	"	12	3	"	8	18	Zotz.	6	3	"	4	3	"
19	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	19	18	Kankin.	10	18	Chen.	8	18	"	6	3	"	4	3	"



FIFTY-THIRD GREAT CYCLE.

10TH CYCLE.]

10			11			12			13			14			15			16			17			18			19		
No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.			
20	13	Ceh.	11	18	Yaxkin.	9	18	Uo.	7	3	Pax.	5	3	Zac.	3	18	Xul.	1	3	Pop.	12	8	Kankin.	10	8	Chen.	8	Zotz.	
1	9	"	7	13	"	5	13	"	3	18	Muan.	1	18	Yax.	12	13	Tzec.	10	3	Uayeb.	8	3	"	6	3	"	4	"	
2	5	"	3	8	"	1	8	"	12	13	"	6	8	"	8	13	"	6	18	Cumhu.	4	18	Mae.	2	18	Mol.	13	Zip.	
3	1	"	12	3	"	10	3	"	8	8	"	2	3	"	4	8	"	2	13	"	13	13	"	11	13	"	9	"	
4	10	Zac.	8	18	Xul.	6	18	Pop.	4	3	"	4	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	"	
5	6	"	4	13	"	2	13	"	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	5	3	"	3	3	"	1	"	
6	2	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	Uo.	
7	11	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	"	
8	7	Yax.	5	18	Tzec.	3	3	Uayeb.	1	3	"	12	3	"	8	8	"	6	8	"	4	8	"	4	8	"	2	"	
9	3	"	1	13	"	10	18	Cumhu.	10	18	Mac.	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"	13	3	"	11	"	
10	12	"	10	8	"	6	13	"	6	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	Pop.	
11	8	"	6	3	"	2	8	"	2	8	"	13	8	"	11	8	"	7	13	"	5	13	"	5	13	"	3	"	
12	4	Chen.	13	3	Zotz.	11	3	"	13	3	"	9	3	"	3	3	Uo.	1	3	"	12	3	"	10	3	"	8	"	
13	13	"	11	13	"	7	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	"	10	18	Muan.	8	18	Yax.	6	18	Tzec.	4	Uayeb.	
14	9	"	7	8	"	3	13	"	12	8	"	1	13	"	10	8	"	6	13	"	4	13	"	2	13	"	13	Cumhu.	
15	5	"	3	3	"	1	8	"	10	3	"	6	8	"	2	8	"	13	8	"	4	13	"	11	8	"	9	15	
16	1	Mol.	12	18	Zip.	8	18	Pax.	4	18	Zac.	2	18	Xul.	6	18	"	2	8	"	13	8	"	7	3	"	5	16	
17	10	"	8	13	"	4	13	"	13	13	"	11	13	"	7	13	Pop.	5	3	"	9	3	"	3	18	Zotz.	1	17	
18	6	"	4	8	"	13	13	"	9	8	"	7	18	Kankin.	3	13	"	7	18	"	1	13	"	12	13	"	10	18	
19	2	"	13	3	"	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	10	18	Kayab.	10	19	



FIFTY-THIRD GREAT CYCLE.

11TH CYCLE.]

20			1			2			3			4			5			6			7			8			9					
	Name of month.		No. of the day Ahan.	Day of the month.		Name of month.	No. of the day Ahan.	Day of the month.		Name of month.	No. of the day Ahan.	Day of the month.		Name of month.	No. of the day Ahan.	Day of the month.		Name of month.	No. of the day Ahan.	Day of the month.		Name of month.	No. of the day Ahan.	Day of the month.		Name of month.	No. of the day Ahan.					
	20	1		2	3			4	5			6	7			8	9			10	11			12	13			14	15	16	17	18
20	6	13	Kayab.	4	13	Ceh.	2	13	Yaxkin.	13	13	Uo.	11	18	Muan.	7	18	Tzec.	5	3	Uayeb.	3	3	Kankin.	3	3	Chen.	1	3			
1	2	8	"	13	8	"	11	8	"	9	5	"	7	13	"	3	13	"	3	1	18	Cumhu.	12	18	Mae.	10	18	Mol.	10	18		
2	11	3	"	9	3	"	7	3	"	1	10	"	3	8	"	12	8	"	8	10	13	"	8	13	"	6	13	"	6	13		
3	7	18	Pax.	5	18	Zac.	3	18	Xul.	1	10	Pop.	12	3	"	8	3	"	3	6	8	"	4	8	"	2	8	"	2	8		
4	3	13	"	1	13	"	12	13	"	6	4	"	8	18	Kankin.	4	18	Zotz.	2	2	3	"	13	3	"	11	3	"	11	3		
5	12	8	"	8	8	"	8	8	"	2	6	"	4	13	"	13	13	"	13	11	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	7	18		
6	8	3	"	6	3	"	4	3	"	11	2	"	13	8	"	9	8	"	5	7	13	"	5	13	"	3	13	"	3	13		
7	4	18	Muan.	2	18	Yax.	13	18	Tzec.	7	13	Uayeb.	9	3	"	5	3	"	3	3	8	"	10	3	"	12	8	"	12	8		
8	13	13	"	11	13	"	7	13	"	3	7	Cumhu.	5	18	Mae.	1	18	Zip.	12	12	3	"	10	3	"	8	3	"	8	3		
9	9	8	"	7	8	"	5	8	"	12	3	"	1	13	"	10	13	"	8	8	18	Pax.	6	18	Zac.	4	18	Xul.	4	18		
10	5	3	"	3	3	"	12	3	"	6	4	"	10	8	"	6	8	"	2	4	13	"	11	8	"	2	13	"	13	13		
11	1	18	Kankin.	12	18	Chen.	10	18	Zotz.	8	6	"	6	3	"	2	3	"	11	13	8	"	11	8	"	9	8	"	9	8		
12	10	13	"	8	13	"	6	13	"	13	9	Kayab.	2	18	Ceh.	11	18	Uo.	9	9	3	"	7	3	"	5	3	"	5	3		
13	6	8	"	4	8	"	13	8	"	9	5	"	11	13	"	7	13	"	7	5	18	Muan.	3	18	Yax.	1	18	Tzec.	1	18		
14	2	3	"	13	3	"	11	3	"	5	14	"	7	8	"	3	8	"	1	1	13	"	12	13	"	10	13	"	10	13		
15	11	18	Mae.	9	18	Mol.	7	18	Zip.	3	5	"	3	3	"	12	3	"	10	8	"	8	8	"	8	8	"	6	8	"	6	8
16	7	13	"	5	13	"	3	13	"	12	10	Pax.	12	18	Zac.	8	18	Pop.	6	6	3	"	4	3	"	2	3	"	2	3		
17	3	8	"	1	8	"	12	8	"	10	6	"	8	13	"	4	13	"	4	2	18	Kankin.	13	18	Chen.	11	18	Zotz.	11	18		
18	12	3	"	10	3	"	8	3	"	6	2	"	4	8	"	13	8	"	13	11	13	"	9	13	"	7	13	"	7	13		
19	8	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	2	"	13	3	"	9	3	"	9	7	8	"	5	8	"	3	8	"	3	8		

FIFTY-THIRD GREAT CYCLE.

11TH CYCLE.]

10				11			12			13			14			15			16			17			18			19								
				Name of month.			Day of the month.			No. of the day Ahau.			Name of month.			Day of the month.			No. of the day Ahau.			Name of month.			Day of the month.			No. of the day Ahau.								
Name of month.				Day of the month.			No. of the day Ahau.			Name of month.			Day of the month.			No. of the day Ahau.			Name of month.			Day of the month.			No. of the day Ahau.			Name of month.			Day of the month.			No. of the day Ahau.		
20	12	3	Zotz.	10	8	Kayab.	8	8	Ceh.	6	8	Yaxkin.	4	8	Uo.	2	13	Muan.	13	13	Yax.	11	13	Tzec.	9	18	Cumhu.	7	18	Mac.	20					
1	8	18	Zip.	6	3	"	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	1					
2	4	13	"	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	2					
3	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	10	3	"	8	3	"	3					
4	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	18	Kayab.	4	18	Ceh.	4					
5	5	18	Uo.	3	3	"	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	5					
6	1	13	"	12	18	Muan.	10	18	Yax.	8	18	Tzec.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	6					
7	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.	7	3	"	5	3	"	7					
8	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.	8					
9	2	18	Pop.	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	9					
10	11	13	"	9	18	Kankin.	7	18	Chen.	5	18	Zotz.	3	3	"	10	3	"	12	3	"	10	3	"	8	8	"	6	8	"	10					
11	7	8	"	5	13	"	3	13	"	1	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	"	2	3	"	11					
12	3	3	"	12	8	"	10	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	13	18	Muan.	11	18	Yax.	12					
13	12	3	Uayeb.	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	13					
14	8	18	Cumhu.	6	18	Mac.	4	18	Mol.	2	18	Zip.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	14					
15	4	13	"	2	13	"	13	13	"	11	13	"	9	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.	12	13	"	1	3	"	15					
16	13	8	"	9	8	"	7	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Kankin.	8	18	Chen.	16					
17	9	3	"	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	17					
18	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	12	18	Uo.	10	3	"	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	18					
19	1	13	"	12	13	"	10	13	"	8	13	"	6	18	Muan.	4	18	Yax.	2	18	Tzec.	13	3	Uayeb.	11	3	"	9	3	"	19					

ARCHAIC CHRONOLOGICAL CALENDAR.

FIFTY-THIRD GREAT CYCLE.

12<sup>TH</sup> CYCLE.]

20				1			2			3			4			5			6			7			8			9								
Name of month.				Day of the month.			No. of the day Aban.			Name of month.			Day of the month.			No. of the day Aban.			Name of month.			Day of the month.			No. of the day Aban.			Name of month.			Day of the month.			No. of the day Aban.		
20	5	18	Mol.	3	18	Zip.	1	3	Kayab.	12	3	Ceh.	10	3	Yaxkin.	8	3	Uo.	6	8	Muan.	4	8	Yax.	2	8	Tzec.	13	13	Cumhu.						
1	1	13	"	12	13	"	10	18	Pax.	8	18	Zac.	6	18	Xul.	2	3	Pop.	2	3	"	13	3	"	11	3	"	9	8	"						
2	10	8	"	6	13	"	6	13	"	4	13	"	2	13	"	11	18	Kankin.	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	5	3	"						
3	6	3	"	2	8	"	2	8	"	13	8	"	11	8	"	3	8	"	7	13	"	5	13	"	3	13	"	1	18	Kayab.						
4	2	18	Yaxkin.	13	18	Uo.	11	3	"	9	3	"	7	3	"	10	8	"	3	8	"	12	8	"	12	8	"	10	13	"						
5	11	13	"	7	18	Muan.	7	18	"	5	18	Yax.	3	18	Tzec.	5	1	Uayeb.	12	3	"	10	3	"	8	3	"	6	8	"						
6	7	8	"	3	13	"	3	13	"	1	13	"	12	13	"	8	18	Mol.	8	18	Mol.	6	18	"	4	18	Zip.	2	3	"						
7	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	2	13	"	4	13	"	13	13	"	9	8	"	11	18	Pax.						
8	12	18	Xul.	10	18	Pop.	8	3	"	6	3	"	4	3	"	11	8	"	13	8	"	11	8	"	9	8	"	7	13	"						
9	8	13	"	6	13	"	4	18	Kankin.	2	18	Chen.	13	18	Zotz.	9	11	"	9	3	"	7	3	"	5	3	"	3	8	"						
10	4	8	"	13	13	"	13	13	"	11	13	"	9	13	"	9	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"						
11	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	5	13	"	1	13	"	12	13	"	10	13	"	8	18	Muan.						
12	9	18	Tzec.	7	3	Uayeb.	5	3	"	3	3	"	1	3	"	8	8	"	10	8	"	8	8	"	6	8	"	4	13	"						
13	5	13	"	3	18	Cumhu.	1	18	Mol.	12	18	Mol.	10	18	Zip.	10	18	"	6	3	"	6	3	"	4	3	"	13	8	"						
14	1	8	"	12	13	"	10	13	"	6	13	"	6	13	"	2	18	Zac.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"						
15	10	3	"	6	8	"	6	8	"	4	8	"	2	8	"	11	13	"	11	13	"	9	13	"	7	13	"	5	18	Kankin.						
16	6	18	Zotz.	4	3	"	2	3	"	13	3	"	11	3	"	5	8	"	7	8	"	5	8	"	3	8	"	12	3	"						
17	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	7	18	"	3	3	"	3	3	"	10	3	"	6	8	"						
18	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	12	18	Muan.	12	18	Yax.	10	18	Tzec.	8	3	"	6	3	"						
19	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	12	8	"	8	13	"	8	13	"	4	18	Cumhu.	2	18	Mac.						



FIFTY-THIRD GREAT CYCLE.

12TH CYCLE.]

10			11			12			13			14			15			16			17			18			19		
20	11	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.
20	11	13	Mac.	9	13	Mol.	7	13	Zip.	5	18	Pax.	3	18	Zac.	12	18	Pop.	12	18	Muan.	10	3	8	Yax.	8	3	6	20
1	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	8	13	"	8	13	Kankin.	6	18	18	Chen.	4	18	2	1
2	3	3	"	1	3	"	10	8	"	6	3	"	4	8	"	4	8	"	4	8	"	2	13	13	"	13	13	11	2
3	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	6	3	"	13	3	"	9	3	"	9	3	"	11	8	8	"	9	8	7	3
4	8	13	"	6	13	"	2	13	"	11	13	Muan.	13	18	Yax.	5	18	Uayeb.	5	18	Mac.	3	18	3	"	5	3	3	4
5	4	8	"	2	8	"	13	8	"	7	8	"	9	13	"	1	13	Cumhu.	1	13	"	12	13	13	Mol.	1	18	12	5
6	13	3	"	11	3	"	9	3	"	3	8	"	5	8	"	3	8	"	1	8	"	8	8	13	"	10	13	8	6
7	9	18	Zac.	7	18	Xul.	5	18	Pop.	13	3	"	10	3	"	10	8	"	10	8	"	4	8	8	"	6	8	4	7
8	5	13	"	3	13	"	1	13	"	12	18	Kankin.	6	13	"	6	13	"	2	13	"	4	3	3	"	2	3	13	8
9	1	8	"	10	8	"	8	8	"	4	8	"	8	8	"	11	13	Kayab.	2	18	Ceh.	13	18	18	Yaxkin.	7	18	9	9
10	10	3	"	6	3	"	6	3	"	2	8	"	2	8	"	11	13	"	11	13	"	9	13	13	"	7	13	5	10
11	6	18	Yax.	4	18	Tzec.	13	3	Uayeb.	13	3	"	11	3	"	7	8	"	7	8	"	5	8	8	"	3	8	1	11
12	2	13	"	13	13	"	9	18	Cumhu.	5	13	Mac.	7	18	Mol.	3	13	"	3	13	"	1	3	3	"	12	3	10	12
13	11	8	"	7	8	"	11	18	"	7	13	"	3	13	"	12	18	Pax.	12	18	Zac.	10	18	18	Xul.	8	18	6	13
14	7	3	"	3	3	"	3	8	"	1	8	"	8	8	"	8	13	"	4	13	"	6	13	13	"	4	13	2	14
15	3	18	Chen.	1	18	Zotz.	12	3	"	6	3	"	4	8	"	4	8	"	4	8	"	11	8	8	"	13	8	7	15
16	12	13	"	10	13	"	2	13	"	2	18	Ceh.	4	18	Yaxkin.	13	3	"	13	3	"	11	3	3	"	9	3	7	16
17	8	8	"	6	8	"	4	13	"	2	13	"	9	13	"	9	18	Muan.	9	18	Yax.	7	18	18	Tzec.	5	18	3	17
18	4	3	"	2	3	"	11	8	"	5	8	"	7	8	"	5	13	"	5	13	"	3	13	13	"	1	13	12	18
19	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	5	3	"	1	8	"	1	8	"	12	8	8	"	10	8	8	19



ARCHAIC CHRONOLOGICAL CALENDAR.

FIFTY-FOURTH GREAT CYCLE.

13TH CYCLE.]

	20			1			2			3			4			5			6			7			8			9			
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	4	8	Cumhu.	2	8	Mae.	13	8	Mol.	11	8	Zip.	9	13	Pax.	7	13	Zac.	5	13	Xul.	3	13	Pop.	1	18	Kankin.	12	18	Chen.	20
1	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	10	8	"	10	13	"	8	13	"	1
2	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	3	"	10	3	"	6	3	"	8	3	"	6	8	"	4	8	"	2
3	5	13	"	3	13	"	1	13	"	12	13	"	8	8	Muan.	8	18	Yax.	6	18	Tzac.	4	3	Uayeb.	4	3	"	2	3	"	3
4	1	8	"	12	8	"	10	8	"	6	8	"	2	8	"	4	13	"	2	13	"	11	18	Cumhu.	11	18	Mae.	9	18	Mol.	4
5	10	3	"	8	3	"	6	3	"	4	3	"	2	3	"	11	8	"	11	8	"	7	3	"	9	13	"	7	13	"	5
6	6	18	Pax.	4	18	Zac.	2	18	Xul.	13	18	Pop.	13	18	"	7	3	"	3	18	Zotz.	3	3	"	10	3	"	12	3	"	6
7	2	13	"	13	13	"	11	13	"	9	13	"	5	8	"	3	13	Chen.	12	13	"	8	18	Kayab.	3	18	Ceh.	6	18	Yaxkin.	8
8	11	8	"	9	8	"	7	8	"	5	8	"	3	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	9
9	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	8	3	"	4	3	"	2	8	"	13	8	"	13	8	"	10
10	3	18	Muan.	1	18	Yax.	12	18	Tzac.	10	3	Uayeb.	6	18	Cumhu.	2	18	Mol.	13	18	Zip.	9	18	Pax.	7	18	Zac.	3	18	Xul.	11
11	12	13	"	10	13	"	8	13	"	4	18	Mae.	13	13	"	11	3	"	5	18	"	9	3	"	9	3	"	7	3	"	12
12	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	7	13	"	3	13	"	7	13	"	5	13	"	13
13	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	5	3	"	12	8	"	3	13	"	12	8	"	6	8	"	14
14	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	7	3	"	10	3	"	8	3	"	7	3	"	10	3	"	4	3	"	15
15	9	13	"	7	13	"	5	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	8	3	"	8	3	"	6	3	"	16
16	5	8	"	3	8	"	1	8	"	10	13	"	10	13	"	8	13	"	6	13	"	4	18	Muan.	2	18	Yax.	13	18	Tzac.	17
17	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	13	13	"	9	13	"	18
18	10	18	Mae.	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"	11	3	"	11	3	"	9	8	"	7	8	"	5	8	"	19
19	6	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.	5	3	"	3	3	"	3	3	"	

FIFTY-FOURTH GREAT CYCLE.

13TH CYCLE.]

10				11			12			13			14			15			16			17			18			19			
		Name of month.		Day of the month.		No. of the day Ahan.		Name of month.		Day of the month.		No. of the day Ahan.		Name of month.		Day of the month.		No. of the day Ahan.		Name of month.		Day of the month.		No. of the day Ahan.		Name of month.		Day of the month.		No. of the day Ahan.	
20	10	18	Zotz.	8	Cumhu.	6	Mac.	4	3	Mol.	2	3	Zip.	11	8	Zac.	9	8	Xul.	7	8	Pop.	5	13	Kankin.	13	18	Chen.	7	18	Chen.
1	6	13	"	4	Kayab.	2	Ceh.	13	18	Yaxkin.	11	18	Uo.	7	3	"	5	3	"	3	3	"	1	8	"	8	"	"	1	8	"
2	2	8	"	13	"	11	"	9	13	"	7	13	"	5	18	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	"	6	18	Mac.	10	3	"
3	11	3	"	9	"	7	"	5	8	"	3	8	"	1	13	"	10	13	"	8	18	Cumhu.	6	18	Mac.	2	13	"	2	13	"
4	7	18	Zip.	3	"	3	"	1	3	"	12	3	"	10	8	"	6	8	"	4	13	"	4	13	"	11	8	"	11	8	"
5	3	13	"	1	Pax.	12	Zac.	10	18	Xul.	8	18	Pop.	4	3	"	4	3	"	13	8	"	7	3	"	3	18	Ceh.	3	18	Ceh.
6	12	8	"	10	"	8	"	6	13	"	13	8	"	2	13	"	7	13	"	5	18	Kayab.	3	18	Ceh.	12	13	"	12	13	"
7	8	3	"	6	"	4	"	2	8	"	9	3	"	7	3	"	3	8	"	1	13	"	10	8	"	8	8	"	8	8	"
8	4	18	Uo.	13	"	13	"	11	3	"	5	3	"	9	3	"	5	8	"	3	8	"	12	3	"	12	13	"	12	13	"
9	13	13	"	11	Muan.	9	Yax.	7	18	Tzec.	5	3	Uayeb.	5	3	"	12	3	"	10	8	"	8	3	"	8	8	"	8	8	"
10	9	8	"	7	"	5	"	3	13	"	1	18	Cumhu.	10	18	Mol.	8	18	Zip.	6	18	"	6	18	"	2	18	Pax.	4	3	"
11	5	3	"	3	"	1	"	12	8	"	6	8	"	10	13	"	4	13	"	11	13	"	2	18	Zac.	13	18	Zac.	4	3	"
12	1	18	Pop.	12	"	10	Chen.	8	3	"	4	18	"	13	8	"	13	8	"	2	8	"	11	13	"	9	13	"	9	13	"
13	10	13	"	8	Kankin.	6	Chen.	4	18	Zotz.	2	3	"	11	3	"	11	3	"	7	3	"	3	18	"	1	18	Yax.	10	18	Yax.
14	6	8	"	4	"	2	"	13	13	"	7	18	Kayab.	7	18	Yaxkin.	5	18	Uo.	3	18	"	12	18	Muan.	6	18	"	6	18	"
15	2	3	"	11	"	7	"	9	8	"	12	3	"	10	8	"	10	8	"	3	8	"	8	13	"	10	13	"	10	13	"
16	11	3	Uayeb.	9	"	7	"	5	3	"	3	8	"	12	3	"	12	8	"	10	8	"	4	13	"	6	13	"	2	8	"
17	7	18	Cumhu.	5	Mac.	3	Mol.	1	13	Zip.	12	13	"	8	18	Zac.	6	18	Pop.	4	8	"	2	8	"	11	3	"	11	3	"
18	3	13	"	1	"	12	"	10	13	"	8	18	Pax.	4	13	"	4	18	"	13	8	"	9	18	Kankin.	7	18	"	7	18	"
19	12	8	"	10	"	8	"	6	8	"	4	13	"	2	13	"	13	8	"	2	13	"	11	13	"	9	18	"	9	18	"

FIFTY-FOURTH GREAT CYCLE.

1ST CYCLE.]

20			1			2			3			4			5			6			7			8			9			
	Name of month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.
	No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.		No. of the day Ahau.	Day of the month.	
20	3	13	Chen.	1	13	Zotz.	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	Pax.	2	3	Zac.	13	3	Xul.	11	3	Pop.
1	12	8	"	10	8	"	8	13	"	4	13	"	6	13	"	2	13	"	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.
2	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Cumhu.
3	4	18	Mol.	2	18	Zip.	13	3	"	11	3	Zac.	9	3	"	7	3	Pop.	5	8	"	3	8	"	1	8	"	12	13	"
4	13	13	"	11	13	"	9	18	Pax.	7	18	Xul.	5	18	Xul.	3	18	"	10	13	"	12	3	"	10	3	"	8	8	"
5	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	6	18	Kankin.	8	18	Chen.	4	13	"	2	13	"
6	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Kayab.
7	1	18	Yaxkin.	12	18	Uo.	10	3	"	4	3	"	6	3	"	2	3	"	11	8	"	13	8	"	11	8	"	9	13	"
8	10	13	"	8	13	"	6	18	Muan.	13	13	Yax.	2	18	Tzec.	13	13	Uayeb.	7	18	Mac.	5	18	Mol.	3	18	Zip.	1	3	"
9	6	8	"	4	8	"	2	13	"	9	8	"	11	13	"	9	18	Cumhu.	3	13	"	1	13	"	10	13	"	10	18	Pax.
10	2	3	"	13	3	"	11	8	"	7	8	"	3	3	"	12	8	"	12	8	"	10	8	"	8	8	"	6	13	"
11	11	18	Xul.	9	18	Pop.	7	3	"	3	3	"	3	3	"	10	8	"	8	3	"	6	3	"	2	18	Yaxkin.	13	18	"
12	7	13	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	10	3	"	4	18	Ceh.	2	18	Yaxkin.	11	13	"	7	18	Muan.
13	3	8	"	1	8	"	12	13	"	6	13	"	8	13	"	6	18	"	13	13	"	11	13	"	9	13	"	3	13	"
14	12	3	"	10	3	"	8	8	"	4	8	"	4	8	"	9	8	"	13	13	"	7	8	"	5	8	"	1	3	"
15	8	18	Tzec.	6	18	Uayeb.	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	3	3	"	7	8	"	5	8	"
16	4	13	"	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.	7	3	"	5	3	"	12	18	Xul.	10	18	Pop.	8	3	"
17	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	4	18	Kankin.
18	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Kankin.
19	5	18	Zotz.	3	3	"	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"



FIFTY-FOURTH GREAT CYCLE.

1st CYCLE.]

	10			11			12			13			14			15			16			17			18			19		
	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.	No. of the day Aha.	Day of the month.	Name of month.
20	9	8	Kankin.	7	8	Chen.	5	8	Zotz.	3	13	Kayab.	1	13	Ceh.	12	13	Yaxkin.	10	13	Uo.	8	18	Muan.	6	18	Yax.	4	18	Tzec.
1	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"
2	1	18	Mac.	12	18	Mol.	10	18	Zip.	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"
3	10	13	"	8	13	"	6	13	"	4	18	Pax.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"	7	3	"	5	3	"
4	6	8	"	4	8	"	2	8	"	11	13	"	11	13	"	9	13	"	7	13	"	5	18	Kankin.	3	18	Chen.	1	18	Zotz.
5	2	3	"	13	3	"	11	3	"	7	8	"	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"
6	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"
7	7	13	"	5	13	"	3	13	"	12	18	Yax.	12	18	Yax.	10	18	Tzec.	8	3	Uayeb.	6	3	"	4	3	"	2	3	"
8	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	18	Cumhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.
9	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	7	13	"
10	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"
11	4	13	"	2	13	"	13	13	"	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	5	3	"	3	3	"	1	3	"	12	3	"
12	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.
13	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	13	"
14	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	8	"
15	1	13	"	12	13	"	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	2	3	"	2	3	"	13	3	"	11	3	"	9	3	"
16	10	8	"	6	8	"	4	13	"	2	13	"	2	13	"	11	18	Pax.	11	18	"	9	18	Zac.	7	18	Xul.	5	18	Pop.
17	6	3	"	4	3	"	2	8	"	7	13	"	11	8	"	5	13	"	7	13	"	5	13	"	3	13	"	1	13	"
18	2	18	Chen.	13	18	Zotz.	11	3	"	9	8	"	7	3	"	3	8	"	3	8	"	1	8	"	12	8	"	10	8	"
19	11	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"	10	3	"	8	3	"	6	3	"



FIFTY-FOURTH GREAT CYCLE.

2ND CYCLE.]

20			1			2			3			4			5			6			7			8			9		
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.			
20	2	Uayeb.	13	3	Kankin.	11	3	Chen.	9	3	Zotz.	7	8	Kayab.	5	8	Ceh.	3	8	Yaxkin.	1	8	Uo.	12	13	Muan.	10	13	Yax.
1	11	Cumhu.	9	18	Mol.	7	18		5	18	Zip.	3	3	"	12	3	"	12	3	"	10	3	"	8	8	"	6	8	"
2	7	13	5	13	"	3	13	"	1	13	"	8	13	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.	4	3	"	2	3	"
3	3	8	1	8	"	12	8	"	10	8	"	6	8	"	4	13	"	4	13	"	2	13	"	13	18	Kankin.	11	18	Chen.
4	12	3	10	3	"	8	3	"	6	3	"	4	8	"	13	8	"	13	8	"	11	8	"	9	13	"	7	13	"
5	8	18	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	9	3	"	9	3	"	7	3	"	5	8	"	3	8	"
6	4	13	2	13	"	11	13	"	11	13	"	9	18	Muan.	5	18	Yax.	5	18	Tzec.	3	18	Uayeb.	1	3	"	12	3	"
7	13	8	11	8	"	9	8	"	7	8	"	5	13	"	1	13	"	3	13	"	12	18	Cumhu.	6	13	Mac.	8	18	Mol.
8	9	3	7	3	"	3	3	"	3	3	"	1	8	"	10	8	"	10	8	"	8	13	"	2	8	"	4	13	"
9	5	18	3	18	Zac.	12	18	"	12	18	Pop.	10	3	"	6	3	"	6	3	"	4	8	"	11	3	"	13	8	"
10	1	13	12	13	"	10	13	"	8	13	"	6	18	Kankin.	2	18	Chen.	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.
11	10	8	8	8	"	6	8	"	4	8	"	2	13	"	11	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.
12	6	3	4	3	"	2	3	"	13	3	"	11	8	"	11	8	"	7	8	"	5	13	"	3	13	"	3	13	"
13	2	18	13	18	Yax.	11	18	Tzec.	9	18	Uayeb.	7	3	"	3	18	"	3	18	"	1	8	"	10	3	"	8	3	"
14	11	13	9	13	"	7	13	"	5	18	Cumhu.	3	18	Mac.	12	18	Mol.	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.
15	7	8	5	8	"	3	8	"	10	13	"	12	13	"	8	13	"	4	18	"	2	13	"	13	13	"	11	13	"
16	3	3	1	3	"	12	3	"	10	8	"	8	8	"	4	8	"	6	8	"	2	13	"	9	8	"	5	3	"
17	12	18	10	18	Chen.	8	18	Zotz.	6	18	"	4	3	"	13	3	"	11	8	"	7	3	"	3	8	"	7	3	"
18	8	13	6	13	"	4	13	"	2	18	Kayab.	13	18	Ceh.	9	18	Yaxkin.	9	18	Uo.	7	3	"	5	3	"	3	3	"
19	4	8	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Muan.	1	18	Yax.	12	18	Tzec.

FIFTY-FOURTH GREAT CYCLE.

2ND CYCLE.]

10			11			12			13			14			15			16			17			18			19				
No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.					
20	6	Tzec.	6	18	Cumhu.	4	18	Mac.	2	18	Mol.	13	18	Zip.	11	3	Kayab.	9	3	Ceh.	7	3	Yaxkin.	5	3	Uo.	3	8	Muan.	20	
1	4	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Pax.	5	18	Zac.	3	18	Xul.	1	18	Pop.	12	3	"	1	
2	13	"	11	8	"	9	8	"	7	8	"	3	8	"	12	8	"	1	8	"	12	13	"	6	8	"	10	13	Kankin.	2	
3	9	Zotz.	7	3	"	5	3	"	3	3	"	1	3	"	10	18	"	10	8	"	6	8	"	2	8	"	4	13	"	3	
4	5	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	6	3	"	6	3	"	4	3	"	13	3	"	2	8	"	4	4
5	1	"	12	13	"	10	13	"	8	13	"	6	13	"	2	8	"	11	13	Yax.	13	18	Tzec.	9	13	Uayeb.	9	3	"	5	5
6	10	"	8	8	"	6	8	"	4	8	"	2	8	"	11	3	"	13	3	"	7	18	Cumhu.	7	18	Cumhu.	5	18	Mac.	6	6
7	6	Zip.	4	3	"	2	3	"	13	3	"	11	3	"	7	18	"	9	8	"	5	8	"	3	13	"	3	13	"	7	7
8	2	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.	5	13	"	1	13	"	12	8	"	10	8	"	6	3	"	8	8
9	11	"	9	13	"	7	13	"	3	13	"	3	13	"	3	18	Kankin.	1	18	Chen.	10	18	Zotz.	6	18	"	8	18	Ceh.	9	9
10	7	"	5	8	"	3	8	"	12	8	"	10	8	"	8	3	"	6	8	"	4	8	"	13	13	"	4	18	"	10	10
11	3	Uo.	1	3	"	12	3	"	10	3	"	8	3	"	4	3	"	6	8	"	13	8	"	11	3	"	9	8	"	11	11
12	12	"	10	18	Muan.	8	18	Yax.	6	18	Tzec.	4	3	Uayeb.	2	3	"	11	18	Mol.	7	18	Zip.	3	18	"	5	3	"	12	12
13	8	"	6	13	"	4	13	"	2	13	"	13	18	Cumhu.	13	18	Mac.	9	18	"	7	18	"	3	13	"	5	3	"	13	13
14	4	"	2	8	"	13	8	"	11	8	"	9	13	"	5	8	"	1	8	"	12	8	"	12	8	"	10	13	"	14	14
15	13	"	11	3	"	7	3	"	3	3	"	7	3	"	10	3	"	3	3	"	12	3	"	8	3	"	6	8	"	15	15
16	9	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	12	13	"	3	3	"	10	3	"	8	3	"	8	3	"	4	8	"	16	16
17	5	"	3	13	"	1	13	"	12	13	"	8	13	"	12	13	Ceh.	6	18	Yaxkin.	4	18	Uo.	4	18	"	2	3	"	17	17
18	1	"	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	11	18	Muan.	9	18	Yax.	18	18
19	10	Uayeb.	8	3	"	6	3	"	4	3	"	2	8	"	11	8	"	13	8	"	9	8	"	7	13	"	5	13	"	19	19

FIFTY-FOURTH GREAT CYCLE.

3RD CYCLE.]

20				1			2			3			4			5			6			7			8			9			
Day of the month.		Name of month.		No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.				
20	1	8	Yax.	12	8	Tzec.	10	13	Cumhu.	8	13	Mac.	6	13	Mol.	20	4	13	Zip.	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.
1	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	1	13	8	"	11	13	"	7	13	"	9	13	"	5	13	"
2	6	18	Chen.	4	18	Zotz.	2	3	"	13	3	"	11	3	"	2	9	3	"	7	8	"	5	8	"	9	8	"	1	8	"
3	2	13	"	13	13	"	11	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	3	5	18	Uo.	3	3	"	12	3	"	12	3	"	10	3	"
4	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	4	1	13	"	12	18	Muan.	10	18	Yax.	8	18	Tzec.	6	3	Uayeb.
5	7	3	"	5	3	"	3	8	"	3	8	"	12	8	"	5	10	8	"	8	13	"	4	13	"	6	13	"	2	18	Cumhu.
6	3	18	Mol.	1	18	Zip.	12	3	"	10	3	"	8	3	"	6	6	3	"	4	8	"	13	8	"	11	8	"	11	13	"
7	12	13	"	10	13	"	8	18	Pax.	6	18	Zac.	4	18	Xul.	7	2	18	Pop.	13	3	"	9	18	Chen.	5	18	Zotz.	3	3	"
8	8	8	"	6	8	"	4	13	"	11	8	"	13	13	"	8	11	13	"	9	13	Kankin.	7	18	"	9	13	"	5	18	"
9	4	3	"	2	3	"	13	8	"	7	3	"	9	8	"	9	7	8	"	5	13	"	12	8	"	10	8	"	8	13	Kayab.
10	13	18	Yaxkin.	11	18	Uo.	5	18	Muan.	3	18	Yax.	1	18	Tzec.	10	12	3	Uayeb.	10	3	"	8	18	Mol.	4	18	Zip.	12	18	"
11	9	13	"	7	13	"	3	8	"	12	13	"	10	13	"	11	8	18	Cumhu.	6	18	Mac.	4	18	"	6	18	"	9	18	"
12	5	8	"	3	8	"	1	13	"	8	3	"	6	8	"	12	4	13	"	2	13	"	13	13	"	11	13	"	2	18	Pax.
13	1	3	"	12	3	"	10	8	"	4	3	"	2	3	"	13	13	8	"	11	8	"	7	8	"	9	8	"	5	13	"
14	10	18	Xul.	8	18	Pop.	6	3	"	2	18	Chen.	11	18	Zotz.	14	13	8	"	11	3	"	5	3	"	3	3	"	1	8	"
15	6	13	"	4	13	"	2	18	Kankin.	13	18	"	7	13	"	15	9	3	"	7	3	"	3	3	"	5	3	"	3	3	"
16	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	16	3	18	Ceh.	3	18	"	1	18	Yaxkin.	12	18	Uo.	10	3	"
17	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	17	12	13	"	12	13	"	8	13	"	6	18	"	6	18	Muan.
18	7	18	Tzec.	5	3	Uayeb.	3	3	"	1	3	"	12	3	"	18	10	8	"	8	8	"	8	8	"	6	8	"	2	13	"
19	3	13	"	1	18	Cumhu.	12	18	Mac.	10	18	Mol.	8	18	Zip.	19	6	3	"	4	3	"	2	3	"	2	3	"	11	8	"



FIFTY-FOURTH GREAT CYCLE.

3RD CYCLE.]

	10			11			12			13			14			15			16			17			18			19				
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.					
20	7	3	Muan.	5	3	Yax.	3	3	Tzec.	1	8	Cumhu.	12	8	Mac.	10	8	Mol.	8	8	Zip.	6	13	Pax.	4	13	Zac.	2	13	Xul.	20	
1	3	18	Kankin.	12	18	Zotz.	10	3		8	3		8	3		6	3		3	3		2	8		13	8		11	8		1	
2	12	13	"	6	13	"	6	18	Kayab.	4	18		13	13	Ceh.	2	18	Yaxkin.	13	18	Uo.	11	3		9	3		7	3		2	
3	8	8	"	4	8	"	2	13	"	13	13	"	9	8	"	7	13	"	9	13	"	7	18	Muan.	5	18	Yax.	3	18	Tzac.	3	
4	4	3	"	13	3	"	11	8	"	9	8	"	5	3	"	3	8	"	5	8	"	3	13	"	10	8	"	12	13	"	4	
5	13	18	Mac.	9	18	Zip.	7	3	"	5	3	"	10	18	Zac.	12	18	Xul.	6	18	Pop.	8	3	"	12	8	"	6	8	"	5	
6	9	13	"	7	13	"	3	18	Pax.	1	18		10	13		8	13		2	13		4	18	Kankin.	2	18	Chen.	13	18	Zotz.	7	
7	5	8	"	1	8	"	12	13	"	6	8	"	6	8	"	4	8	"	2	8	"	13	13	"	7	8	"	9	13	"	8	
8	1	3	"	10	3	"	8	3	"	2	3	"	2	3	"	11	3	"	11	3	"	9	8	"	7	8	"	5	8	"	9	
9	10	18	Ceh.	6	18	Uo.	13	18	Muan.	11	18		7	13	Yax.	9	18	Tzec.	3	18	Uayeb.	5	3	"	12	13		3	3	"	10	
10	6	13	"	2	13	"	9	13	"	7	13		11	18		5	13	"	10	18	Cumhu.	1	18	Mac.	8	18	Mol.	10	18	Zip.	11	
11	2	8	"	11	8	"	5	8	"	3	8	"	3	8	"	12	1	8	"	12	13		10	13		6	13		6	13		12
12	11	3	"	7	3	"	1	3	"	12	3	"	12	3	"	10	3	"	10	3	"	6	8	"	10	8	"	2	8	"	13	
13	7	18	Zac.	3	18	Pop.	3	18		8	18		8	18	Chen.	4	18	Zotz.	4	18		4	3	"	13	18	Yaxkin.	7	18	Uo.	14	
14	3	13	"	1	13	"	6	13	Kankin.	8	18		4	13		2	13	"	11	18	Kayab.	2	3	"	9	18		11	3	"	15	
15	12	8	"	8	8	"	6	13	"	4	13	"	13	8	"	11	13	"	2	13		11	18	Ceh.	9	18	Yaxkin.	7	18		16	
16	8	3	"	4	3	"	2	8	"	13	8	"	7	3	"	9	8	"	7	13	"	7	13	"	5	13	"	12	8	"	17	
17	4	18	Yax.	6	18	Tzec.	11	3	"	3	8	"	3	8	"	5	8	"	3	8	"	12	3	"	10	3	"	8	3	"	18	
18	13	13	"	9	13	"	6	13	"	5	13	"	10	18		8	13	"	4	18	Pax.	8	18	Zac.	6	18	Xul.	4	18	Pop.	19	



FIFTY-FOURTH GREAT CYCLE.

4TH CYCLE.]

	20			1			2			3			4			5			6			7			8			9		
	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.			
20	13	13	Pop.	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	5	3	Cumhu.	3	3	Mac.	1	3	Mol.	12	3	Zip.	10	8	Pax.	8	8	Zac.
1	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	6	3	"	4	3	"
2	5	3	"	3	8	"	1	8	"	12	8	"	6	13	"	9	13	"	6	13	"	4	13	"	2	18	Muan.	13	18	Yax.
3	1	3	Uayeb.	12	3	"	10	3	"	8	3	"	4	8	"	6	8	"	2	8	"	13	8	"	11	13	"	9	13	"
4	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	4	18	Zip.	2	3	"	11	3	"	11	3	"	9	3	"	7	8	"	5	8	"
5	6	13	"	4	13	"	2	13	"	13	13	"	13	3	Pax.	11	18	Zac.	7	18	Xul.	5	18	Pop.	3	3	"	3	3	"
6	2	8	"	13	8	"	11	8	"	9	8	"	5	13	"	7	13	"	3	13	"	1	13	"	12	18	Kankin.	10	18	Chen.
7	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	3	8	"	12	8	"	10	8	"	6	13	"	8	13	"
8	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"	8	3	"	8	3	"	6	3	"	4	8	"	2	8	"
9	3	13	"	1	13	"	12	13	"	10	13	"	6	18	Muan.	3	18	Yax.	4	18	Tzac.	2	3	Uayeb.	13	3	"	11	3	"
10	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	4	13	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.
11	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	13	8	"	9	8	"	7	13	"	5	13	"	3	13	"
12	4	18	Pax.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"	9	3	"	5	3	"	3	8	"	12	3	"	10	3	"
13	13	13	"	11	13	"	9	13	"	7	13	"	3	18	Kankin.	5	18	Chen.	1	18	Zotz.	12	3	"	8	18	"	4	18	Yaxkin.
14	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	1	13	"	10	13	"	6	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.
15	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	10	8	"	6	8	"	4	13	"	2	13	"	13	13	"
16	1	18	Muan.	12	18	Yax.	10	18	Tzac.	8	3	Uayeb.	6	3	"	6	3	"	2	3	"	13	8	"	11	8	"	9	8	"
17	10	13	"	8	13	"	6	13	"	4	18	Cumhu.	2	18	Mac.	2	18	Mol.	11	18	Zip.	9	3	"	7	3	"	5	3	"
18	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	11	13	"	7	13	"	5	18	Pax.	3	18	Zac.	1	18	Xul.
19	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	7	8	"	3	8	"	1	13	"	12	13	"	10	13	"

10			11			12			13			14			15			16			17			18			19		
No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	6	Xul.	4	8	Pop.	2	13	Kankin.	13	13	Chen.	11	13	Zotz.	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	3	Pax.
1	2	"	13	3	"	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Muan.
2	11	Tzec.	9	3	Uayeb.	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"
3	7	"	5	18	Cumhu.	3	18	Mac.	1	18	Mol.	12	18	Zip.	10	3	"	8	3	"	6	3	"	4	3	"	2	8	"
4	3	"	1	13	"	12	13	"	10	13	"	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.	13	18	Pop.	11	3	"
5	12	"	10	8	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Kankin.
6	8	Zotz.	6	3	"	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"
7	4	"	2	18	Kayab.	13	18	Ceh.	11	18	Yaxkin.	9	18	Uo.	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"
8	13	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Muan.	1	18	Yax.	12	18	Tzec.	10	3	Uayeb.	8	3	"
9	9	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	18	Cumhu.	4	18	Mac.
10	5	Zip.	3	3	"	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"
11	1	"	12	18	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"
12	10	"	8	13	"	6	13	"	4	13	"	2	13	"	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	5	3	"
13	6	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Kayab.	1	18	Ceh.
14	2	Uo.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"
15	11	"	9	18	Muan.	7	18	Yax.	5	18	Tzec.	3	3	Uayeb.	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"
16	7	"	5	13	"	3	13	"	1	13	"	12	18	Cumhu.	10	18	Mac.	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"
17	3	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.
18	12	Pop.	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"
19	8	"	6	18	Kankin.	4	18	Chen.	2	18	Zotz.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"

FIFTY-FOURTH GREAT CYCLE.

5TH CYCLE.]

20			1			2			3			4			5			6			7			8			9						
	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.						
	Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.		Day of the month.		Day of the month.	
20	12	3	Zac.	10	3	Xul.	8	3	Pop.	6	8	Kankin.	4	8	Chen.	2	8	Zotz.	13	13	Kayab.	11	13	Ceh.	9	13	Yaxkin.	7	13	Uo.	20		
1	8	18	Yax.	6	18	Tzec.	4	3	Uayeb.	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	1		
2	4	13	"	2	13	"	13	18	Cumhu.	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"	3	3	"	1	3	"	2		
3	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	"	10	18	Pax.	12	18	Zac.	10	18	Xul.	8	18	Pop.	3	
4	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	"	6	13	"	8	13	"	2	8	"	4	13	"	4	
5	5	18	Chen.	3	18	Zotz.	1	3	"	12	3	"	10	3	"	8	3	"	"	2	3	"	4	3	"	13	8	"	9	3	"	5	
6	1	13	"	12	13	"	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	3	"	11	3	"	13	3	"	7	18	Tzec.	5	3	6
7	10	8	"	8	8	"	6	13	"	4	13	"	13	8	"	2	13	"	"	7	13	Muan.	5	13	Yax.	3	13	"	3	18	Cumhu.	8	
8	6	3	"	4	3	"	2	8	"	11	3	"	7	3	"	9	8	"	"	3	8	"	10	3	"	1	8	"	12	8	"	9	
9	2	18	Mol.	13	18	Zip.	11	3	"	9	3	"	7	3	"	5	3	"	Pop.	12	3	"	8	3	"	1	3	"	10	13	"	10	
10	11	13	"	9	13	"	7	18	Pax.	5	18	Zac.	3	18	Xul.	1	18	Pop.	12	3	"	6	18	Chen.	4	18	Zotz.	2	3	"	11		
11	7	8	"	5	8	"	3	13	"	3	13	"	12	13	"	8	18	Kankin.	8	18	Kankin.	6	18	Chen.	10	18	Zip.	2	3	"	12		
12	3	3	"	1	3	"	10	8	"	12	8	"	8	8	"	6	8	"	"	4	13	"	13	13	"	2	13	"	7	13	"	13	
13	12	18	Yaxkin.	10	18	Uo.	8	3	"	4	18	Yax.	13	18	Tzec.	11	3	Uayeb.	9	3	"	9	3	"	7	3	"	5	3	"	14		
14	8	13	"	6	13	"	13	13	"	4	18	Muan.	2	18	"	11	13	Cumhu.	5	18	Mac.	3	18	Mol.	12	13	"	1	18	Zip.	15		
15	4	8	"	2	8	"	7	8	"	9	8	"	5	8	"	7	8	"	"	1	13	"	12	13	"	6	8	"	8	18	Pax.	16	
16	13	3	"	11	3	"	3	3	"	3	3	"	1	3	"	10	13	"	"	1	13	"	12	13	"	8	8	"	4	13	"	17	
17	9	18	Xul.	7	18	Pop.	5	3	"	12	8	"	9	3	"	8	3	"	"	6	3	"	4	3	"	2	3	"	13	8	"	18	
18	5	13	"	3	13	"	1	18	Kankin.	12	18	Chen.	10	18	Zotz.	8	3	"	"	6	3	"	4	3	"	2	3	"	9	3	"	19	
19	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	11	18	Uo.	9	3	"			



5TH CYCLE.] FIFTY-FOURTH GREAT CYCLE.

	10			11			12			13			14			15			16			17			18			19		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.			
20	5	18	Muan.	3	18	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	Kankin.	8	3	Chen.	6	3	Zotz.	4	8	Kayab.	2	8	Ceh.	13	8	Yaxkin.
1	1	13	"	12	13	"	10	13	"	8	18	Cumhu.	6	18	Mac.	4	18	Mol.	2	18	Zip.	13	3	"	11	3	"	9	3	"
2	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	11	13	"	13	13	"	7	18	Pax.	7	18	Zac.	5	18	Xul.
3	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	7	8	"	9	8	"	5	13	"	3	13	"	1	13	"
4	2	18	Kankin.	13	18	Chen.	11	18	Zotz.	9	3	"	7	3	"	3	3	"	5	3	"	1	8	"	12	8	"	10	8	"
5	11	13	"	9	13	"	5	18	"	1	13	"	3	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	10	3	"	6	3	"	8	3	"
6	7	8	"	5	8	"	3	8	"	10	13	"	12	13	"	8	13	"	6	18	Muan.	6	18	"	4	18	Yax.	2	18	Tzec.
7	3	3	"	1	3	"	12	3	"	6	8	"	8	8	"	4	8	"	4	8	"	2	13	"	13	13	"	11	13	"
8	12	18	Mac.	10	18	Mol.	8	18	Zip.	6	3	"	4	3	"	13	3	"	13	3	"	11	8	"	9	8	"	7	8	"
9	8	13	"	6	13	"	4	13	"	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"
10	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	5	13	"	7	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.
11	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	12	3	"	3	8	"	12	13	"	8	8	"	4	8	"
12	9	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	3	3	"	1	3	"	10	3	"	10	3	"	8	8	"	6	8	"	2	8	"
13	5	13	"	3	13	"	1	13	"	12	18	Muan.	10	18	Yax.	8	18	Tzec.	6	3	Uayeb.	4	3	"	13	3	"	2	3	"
14	1	8	"	12	8	"	6	8	"	8	13	"	6	13	"	11	13	"	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.
15	10	3	"	6	3	"	4	3	"	13	8	"	2	8	"	11	13	"	11	13	"	9	13	"	7	13	"	5	13	"
16	6	18	Zac.	4	18	"	13	18	Pop.	2	18	"	11	3	"	7	8	"	7	8	"	5	8	"	3	8	"	1	8	"
17	2	13	"	13	13	"	9	13	"	11	13	"	7	13	Chen.	10	13	Zotz.	3	3	"	1	3	"	12	3	"	10	3	"
18	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	12	18	Yaxkin.	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.
19	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	8	13	"	8	13	"	6	13	"	4	13	"	2	13	"



	20			1			2			3			4			5			6			7			8			9			
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.				
20	11	8	Uo.	9	13	Muan.	7	13	Yax.	5	13	Tzec.	3	18	Cumhu.	20	1	18	Mac.	12	18	Mol.	10	18	Zip.	8	3	Kayab.	6	3	Ceh.
1	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	1	10	13	"	8	13	"	6	13	"	4	18	Pax.	2	18	Zac.
2	3	18	Pop.	1	3	"	12	3	"	10	3	"	8	8	"	2	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"
3	12	13	"	10	18	Kankin.	8	18	Chen.	6	18	Zotz.	4	3	"	3	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"
4	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Kayab.	4	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"
5	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	5	7	13	"	5	13	"	3	13	"	1	18	Muan.	12	18	Yax.
6	13	3	Uayeb.	11	3	"	9	3	"	7	3	"	5	8	"	6	3	8	"	1	8	"	12	8	"	6	13	"	8	13	"
7	9	18	Cumhu.	7	18	Mac.	5	18	Mol.	3	18	Zip.	1	3	"	7	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"
8	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Pax.	8	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	13	3	"
9	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	9	4	13	"	2	13	"	13	13	"	11	18	Kankin.	9	18	Chen.
10	10	3	"	8	3	"	6	3	"	4	3	"	2	8	"	10	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"
11	6	18	Kayab.	4	18	Ceh.	2	18	Yaxkin.	13	18	Uo.	11	3	"	11	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"
12	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Muan.	12	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	12	3	"	10	3	"
13	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	13	1	13	"	12	13	"	10	18	Cumhu.	8	18	Mac.	6	18	Mol.
14	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	10	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"
15	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	6	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"
16	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Kankin.	16	2	18	Chen.	13	18	Zotz.	11	3	"	9	3	"	7	3	"
17	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	17	11	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.
18	4	3	"	2	3	"	13	3	"	11	3	"	9	8	"	18	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"
19	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.	5	3	"	19	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"

10			11			12			13			14			15			16			17			18			19			
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	4	Yaxkin.	2	3	Uo.	13	8	Muan.	11	8	Yax.	9	8	Tzec.	7	13	Cumhu.	5	13	Mac.	3	13	Mol.	1	13	Zip.	12	18	Pax.	20
1	13	Xul.	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	10	8	"	10	8	"	8	13	"	1
2	9	"	7	13	"	5	18	Kankin.	3	18	Chen.	1	18	Zotz.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	2
3	5	"	3	8	"	1	13	"	10	13	"	12	13	"	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	3
4	1	"	12	3	"	10	8	"	6	8	"	8	8	"	6	13	"	2	13	"	11	13	"	11	13	"	9	18	Muan.	4
5	10	Tzec.	8	18	Uayeb.	6	3	"	2	3	"	4	3	"	11	8	"	11	8	"	7	8	"	7	8	"	5	13	"	5
6	6	"	4	18	Cumhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	7	3	"	3	3	"	1	8	"	6
7	2	"	13	13	"	13	13	"	7	13	"	9	13	"	3	8	Pax.	5	18	Zac.	3	18	Xul.	1	18	Pop.	12	18	"	7
8	11	"	9	8	"	7	8	"	3	8	"	5	8	"	3	8	"	12	13	"	12	13	"	10	13	"	6	18	Kankin.	8
9	7	Zotz.	5	3	"	3	3	"	1	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	8	"	2	13	"	9
10	3	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	6	3	"	4	3	"	4	3	"	2	3	"	13	8	"	10
11	12	"	10	13	"	8	13	"	6	13	"	4	13	"	13	18	Muan.	13	18	Yax.	11	18	Tzec.	9	3	Uayeb.	7	3	"	11
12	8	"	6	8	"	4	8	"	2	8	"	2	8	"	13	8	"	9	13	"	9	13	"	7	13	Cumhu.	3	18	Mac.	12
13	4	Zip.	2	3	"	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	5	8	"	3	8	"	12	13	"	13
14	13	"	11	18	Pax.	9	18	Zac.	7	18	Xul.	5	18	Pop.	3	3	"	1	3	"	1	3	"	12	3	"	10	8	"	14
15	9	"	7	13	"	5	13	"	3	13	"	1	13	"	10	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	4	3	"	15
16	5	"	3	8	"	1	8	"	6	13	"	12	8	"	10	8	"	6	13	"	6	13	"	4	13	Kayab.	13	18	Ceh.	16
17	1	Uo.	12	3	"	10	3	"	8	3	"	6	3	"	13	8	"	2	8	"	13	8	"	9	3	"	9	13	"	17
18	10	"	8	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	13	3	"	11	3	"	11	3	"	9	3	"	5	8	"	18
19	6	"	4	13	"	2	13	"	11	13	"	13	13	"	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	18	"	3	3	"	19

ARCHAIC CHRONOLOGICAL CALENDAR.

7TH CYCLE.] FIFTY-FOURTH GREAT CYCLE.

	20			1			2			3			4			5			6			7			8			9		
	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.
20	10	18	Zac.	8	18	Xul.	6	18	Pop.	4	3	Muan.	2	3	Yax.	13	3	Tzec.	11	8	Cumhu.	9	8	Mac.	7	8	Mol.	5	8	Zip.
1	6	13	"	4	13	"	2	13	"	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	5	3	"	3	3	"	1	3	"
2	2	8	"	13	8	"	11	8	"	9	13	"	7	8	"	5	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.
3	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"
4	7	18	Yax.	5	18	Tzec.	3	18	Uayeb.	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"
5	3	13	"	1	13	"	12	18	Cumhu.	10	18	Mac.	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"	13	3	"	11	3	"
6	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.
7	8	3	"	6	3	"	13	8	"	13	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"
8	4	18	Chen.	2	18	Zotz.	13	18	"	11	18	"	9	18	"	7	18	"	5	18	"	3	18	"	1	18	"	12	18	"
9	13	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	3	"	12	3	"	10	3	"	8	3	"
10	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Muan.	8	18	Yax.	6	18	Tzec.	4	18	Uayeb.
11	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	11	8	"	2	13	"
12	1	18	Mol.	12	18	Zip.	10	18	Pax.	6	18	Zac.	2	18	Xul.	13	18	Pop.	11	3	"	9	3	"	7	3	"	5	3	"
13	10	13	"	8	13	"	6	13	"	13	13	"	11	13	"	9	13	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	1	18	"
14	6	8	"	4	8	"	2	13	"	11	8	"	7	8	"	10	8	"	8	13	"	6	13	"	4	8	"	2	13	"
15	2	3	"	13	3	"	11	8	"	9	3	"	7	3	"	5	3	"	3	13	"	1	13	"	12	13	"	10	13	"
16	11	18	Yaxkin.	9	18	Uo.	7	18	"	3	18	Muan.	1	18	"	12	18	"	10	8	"	8	8	"	6	8	"	4	8	"
17	7	13	"	5	13	"	3	18	"	12	13	"	10	13	"	8	13	"	6	3	"	4	3	"	2	3	"	1	3	"
18	3	8	"	1	8	"	1	8	"	10	13	"	8	13	"	6	18	Cumhu.	4	18	Mac.	2	18	Mol.	13	18	Zip.	11	18	"
19	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Pax.



10			11			12			13			14			15			16			17			18			19		
	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.	Name of month.		No. of the day Ahan.		
	Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.	
20	3	Pax.	12	13	Zac.	10	13	Xul.	8	18	Pop.	6	18	Chen.	4	18	Zotz.	2	3	Cumhu.	13	3	Mac.	11	3	Mol.	11	3	Mol.
1	12	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	11	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	7	18	Yaxkin.
2	8	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	3	13	"
3	4	Muan.	13	18	Yax.	11	3	Uayeb.	9	3	Uayeb.	5	3	"	5	3	"	3	8	"	1	8	"	12	8	"	12	8	"
4	13	"	9	13	"	7	18	Cumhu.	5	18	Cumhu.	3	18	Mol.	1	18	Zip.	12	3	"	10	3	"	8	3	"	8	3	"
5	9	"	5	8	"	12	8	"	1	13	"	10	13	"	6	13	"	8	18	Pax.	6	18	Zac.	4	18	Xul.	4	18	Xul.
6	5	"	1	3	"	6	3	"	10	8	"	2	3	"	4	8	"	2	13	"	2	13	"	13	13	"	13	13	"
7	1	Kankin.	10	18	Chen.	8	3	"	6	3	"	4	3	"	13	3	"	13	8	"	11	8	"	11	8	"	9	8	"
8	10	"	6	13	"	4	18	Kayab.	2	18	Kayab.	13	18	Yaxkin.	11	18	Uo.	7	3	"	5	18	Yax.	3	18	Tzec.	5	3	"
9	6	"	2	8	"	13	8	"	7	8	"	9	8	"	7	13	"	5	18	Muan.	12	13	"	3	18	Tzec.	1	18	Tzec.
10	2	"	11	3	"	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	1	13	"	6	8	"	10	13	"
11	11	Mac.	7	18	Mol.	1	18	Zip.	12	18	Pax.	10	18	Xul.	8	18	Pop.	6	3	"	4	3	"	2	3	"	2	3	"
12	7	"	3	13	"	1	13	"	8	13	"	6	13	"	4	13	"	13	18	Kankin.	13	18	Chen.	11	18	Zotz.	11	18	Zotz.
13	3	"	12	8	"	6	8	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	7	13	"
14	12	"	8	3	"	4	3	"	13	3	"	7	3	"	9	3	"	11	8	"	5	8	"	3	8	"	3	8	"
15	8	Ceh.	6	18	Yaxkin.	2	18	Uo.	9	18	Muan.	7	18	Tzec.	5	3	Uayeb.	3	3	"	1	3	"	12	3	"	12	3	"
16	4	"	13	13	"	11	13	"	5	13	"	3	13	"	1	18	Cumhu.	10	18	Mac.	10	18	Mol.	8	18	Zip.	8	18	Zip.
17	13	"	9	8	"	7	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	13	"	4	13	"
18	9	"	5	3	"	3	3	"	1	3	"	8	3	"	10	13	"	6	8	"	2	8	"	2	8	"	13	8	"
19	5	Zac.	3	18	Xul	1	18	Pop.	10	3	"	8	3	"	6	8	"	6	8	"	4	8	"	2	8	"	13	8	"



ARCHAIC CHRONOLOGICAL CALENDAR.

FIFTY-FOURTH GREAT CYCLE.

8TH CYCLE.]

	20			1			2			3			4			5			6			7			8			9		
	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.
20	9	3	Zip.	7	8	Pax.	5	8	Zac.	3	8	Xul.	1	8	Pop.	12	13	Kankin.	10	13	Chen.	8	13	Zotz.	6	18	Kayab.	4	18	Ceh.
1	5	18	Uo.	3	3	"	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"
2	1	13	"	12	18	Muan.	10	18	Yax.	3	18	Tzac.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"
3	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.	7	3	"	5	3	"
4	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.
5	2	18	Pop.	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"
6	11	13	"	9	18	Kankin.	7	18	Chen.	5	18	Zotz.	3	3	"	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"
7	7	8	"	5	13	"	3	13	"	1	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	"	2	3	"
8	3	3	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	13	18	Muan.	11	18	Yax.
9	12	3	Uayeb.	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"
10	8	18	Cumhu.	6	18	Mac.	4	18	Mol.	2	18	Zip.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"
11	4	13	"	2	13	"	13	13	"	11	13	"	9	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.	1	3	"	12	3	"
12	13	8	"	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Kankin.	8	18	Chen.
13	9	3	"	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"
14	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	12	18	Uo.	10	3	"	8	3	"	6	3	"	4	3	"	13	8	"	13	8	"
15	1	13	"	12	13	"	10	13	"	8	13	"	6	18	Muan.	13	13	"	4	13	"	11	13	Uayeb.	7	3	"	9	3	"
16	10	8	"	8	8	"	6	8	"	4	8	"	2	13	"	13	8	"	11	13	"	9	18	Cumhu.	7	18	Mac.	5	18	Mol.
17	6	3	"	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"
18	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"
19	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	10	3	"	8	3	"	6	3	"

ARCHAIC CHRONOLOGICAL CALENDAR.

8TH CYCLE.]

FIFTY-FOURTH GREAT CYCLE.

	10			11			12			13			14			15			16			17			18			19			
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	2	18	Yaxkin.	13	18	Uo.	11	3	Pax.	9	3	Zac.	7	3	Xul.	5	3	Pop.	3	8	Kankin.	1	8	Chen.	12	8	Zotz.	10	13	Kayab.	20
1	11	13	"	9	13	"	7	18	Muan.	5	18	Yax.	3	18	Tzec.	12	3	Uayeb.	1	3	"	10	3	"	8	3	"	6	8	"	1
2	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	8	18	Cumhu.	10	18	Mac.	6	18	Mol.	4	18	Zip.	2	3	"	2
3	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	13	3	"	6	13	"	2	13	"	13	13	"	11	18	Pax.	3
4	12	18	Xul.	10	18	Pop.	8	3	"	6	3	"	4	3	"	2	8	"	2	8	"	11	8	"	9	8	"	7	13	"	4
5	8	13	"	6	13	"	4	18	Kankin.	2	18	Chen.	13	18	Zotz.	11	3	"	11	3	"	9	3	"	7	3	"	5	3	"	5
6	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	5	18	Ceh.	3	18	Yaxkin.	3	18	Yaxkin.	1	18	Uo.	12	3	"	6
7	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	1	13	"	7	13	"	12	13	"	12	13	"	10	13	Muan.	7
8	9	18	Tzec.	7	3	Uayeb.	5	3	"	3	3	"	1	3	"	10	8	"	12	8	"	8	8	"	8	8	"	6	8	"	8
9	5	13	"	3	18	Cumhu.	1	18	Mac.	12	18	Mol.	10	18	Zip.	6	3	"	8	3	"	4	3	"	4	3	"	2	3	"	9
10	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	2	18	Zac.	4	18	Pax.	13	18	Xul.	13	18	Pop.	11	3	"	10
11	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"	11	13	"	13	8	"	9	13	"	9	13	"	7	13	"	11
12	6	18	Zotz.	4	3	"	2	3	"	13	3	"	11	3	"	7	18	Uo.	5	3	"	3	8	"	1	3	"	12	3	"	12
13	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Xul.	5	13	"	9	18	Yax.	10	18	Tzec.	8	3	Uayeb.	6	3	"	14
14	11	8	"	9	13	"	7	13	"	3	8	"	12	8	"	3	13	"	1	18	Muan.	12	18	Yax.	6	13	Cumhu.	2	18	Mac.	15
15	7	3	"	5	8	"	3	8	"	1	8	"	10	3	"	8	8	"	4	8	"	6	13	"	2	8	"	13	13	"	16
16	3	18	Zip.	1	3	"	12	3	"	10	3	"	8	3	"	4	3	"	2	3	"	11	3	"	9	8	"	7	8	"	17
17	12	13	"	8	18	Pax.	8	18	Zac.	6	18	Xul.	4	18	Pop.	13	3	"	11	3	"	7	18	Zotz.	5	3	"	3	3	"	18
18	8	8	"	4	13	"	2	13	"	1	13	"	13	13	"	9	18	Kankin.	11	18	Ceh.	7	18	Zotz.	5	3	"	3	3	"	19
19	4	3	"	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	7	13	"	3	13	"	3	13	"	1	18	Kayab.	19

9TH CYCLE.] FIFTY-FOURTH GREAT CYCLE.

	20			1			2			3			4			5			6			7			8			9		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.			
20	8	13	Ceh.	6	13	Yaxkin.	4	13	Uo.	2	18	Muan.	13	18	Yax.	11	18	Tzec.	9	3	Uayeb.	7	3	Kankin.	5	3	Chen.	3	Zotz.	
1	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	18	Cumhu.	3	18	Mac.	1	18	Mol.	12	18	Zip.
2	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	8	13	"
3	9	18	Zac.	7	18	Xul.	5	18	Pop.	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	4	8	"
4	5	13	"	3	13	"	1	13	"	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	4	3	"	2	3	"	13	3	"
5	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Kayab.	13	18	Ceh.	11	18	Yaxkin.	9	18	Uo.
6	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"
7	6	18	Yax.	4	18	Tzec.	2	18	Uayeb.	13	3	"	11	3	"	9	3	"	7	8	"	3	8	"	1	8	"	10	3	"
8	2	13	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.	5	18	Zip.	3	3	"	12	3	"	1	3	"	12	3	"
9	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.
10	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"
11	3	18	Chen.	1	18	Zotz.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	13	8	"	11	8	"	7	8	"
12	12	13	"	10	13	"	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	9	3	"	7	3	"	9	3	"
13	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	11	13	"	9	18	Muan.	7	18	Yax.	5	18	Tzec.	3	18	Uayeb.
14	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	3	8	"	5	13	"	3	13	"	1	13	"	12	18	Cumhu.
15	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	5	3	"	12	3	"	1	8	"	10	8	"	8	8	"	6	8	"
16	9	13	"	7	13	"	5	18	Pax.	3	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"	8	3	"	6	3	"	4	8	"
17	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	4	13	"	6	18	Kankin.	4	18	Chen.	2	18	Zotz.	13	3	"
18	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	8	8	"	2	13	"	13	13	"	11	13	"	9	18	Kayab.
19	10	18	Yaxkin.	8	18	Uo.	6	3	"	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	13	"



ARCHAIC CHRONOLOGICAL CALENDAR.

FIFTY-FOURTH GREAT CYCLE.

9TH CYCLE.]

	10			11			12			13			14			15			16			17			18			19		
	10			11			12			13			14			15			16			17			18			19		
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.
20	1	8	Kayab.	12	8	Ceh.	10	8	Yaxkin.	8	8	Uo.	6	13	Muan.	4	13	Yax.	2	13	Tzec.	13	18	Cumhu.	11	18	Mac.	9	18	Mol.
1	10	3	"	3	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"
2	6	18	Pax.	4	18	Zac.	2	18	Xul.	13	18	Pop.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"
3	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	1	3	"	12	3	"	10	3	"
4	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.
5	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"
6	3	18	Muan.	1	18	Yax.	12	18	Tzec.	10	3	Uayeb.	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"
7	12	13	"	10	13	"	8	13	"	6	18	Cumhu.	4	18	Mac.	2	18	Mol.	13	18	Zip.	11	3	"	9	3	"	7	3	"
8	3	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Pax.	5	18	Zac.	3	18	Xul.
9	4	3	"	13	3	"	11	3	"	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"
10	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"
11	9	13	"	5	13	"	3	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	8	3	"	6	3	"	4	3	"
12	5	8	"	1	8	"	10	8	"	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Muan.	2	18	Yax.	13	18	Tzec.
13	1	3	"	10	3	"	8	3	"	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"
14	10	18	Mac.	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"
15	6	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.	5	3	"	3	3	"	1	3	"
16	2	8	"	11	8	"	9	8	"	7	18	"	7	18	"	5	18	"	3	18	"	1	18	Kankin.	12	18	Chen.	10	18	Zotz.
17	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"
18	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	18	Zip.	6	3	"	4	3	"	2	3	"
19	3	13	"	1	13	"	11	13	"	9	13	"	7	13	"	5	13	"	3	13	"	1	3	"	13	3	"	11	3	"



20	1			2			3			4			5			6			7			8			9					
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.						
20	7	18	Zip.	5	3	Kayab.	3	3	Ceh.	1	3	Yaxkin.	12	3	Uo.	20	10	Muan.	8	8	Yax.	6	8	Tzec.	4	13	Cumhu.	2	13	Mac.
1	3	13	"	1	18	Pax.	12	18	Zac.	10	18	Xul.	8	18	Pop.	1	6	"	4	3	"	2	3	"	13	8	"	11	8	"
2	12	8	"	10	13	"	8	13	"	6	13	"	4	13	"	2	2	Kankin.	13	18	Chen.	11	18	Zotz.	9	3	"	7	3	"
3	8	3	"	6	8	"	4	8	"	2	8	"	13	8	"	3	11	"	9	13	"	7	13	"	5	18	Kayab.	3	18	Ceh.
4	4	18	Uo.	2	3	"	13	3	"	11	3	"	9	3	"	4	7	"	5	8	"	3	8	"	1	13	"	12	13	"
5	13	13	"	11	18	Muan.	9	18	Yax.	7	18	Tzec.	5	3	Uayeb.	5	3	"	1	3	"	12	3	"	8	3	"	4	3	"
6	9	8	"	7	13	"	5	13	"	3	13	"	10	13	Cumhu.	6	12	Mac.	10	18	Mol.	8	18	Zip.	6	3	"	6	3	"
7	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	7	8	"	6	13	"	4	13	"	11	13	"	13	18	Zac.
8	1	18	Pop.	12	3	"	10	3	"	8	3	"	6	8	"	8	4	"	2	8	"	13	8	"	7	8	"	9	13	"
9	10	13	"	8	18	Kankin.	6	18	Chen.	4	18	Zotz.	2	3	"	9	13	"	11	3	"	9	3	"	7	8	"	5	8	"
10	6	8	"	4	13	"	13	13	"	11	18	Kayab.	11	13	"	7	5	Ceh.	7	18	Yaxkin.	5	18	Uo.	3	3	"	12	18	Muan.
11	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	10	9	"	3	13	"	1	13	"	12	18	"	10	18	Yax.
12	11	3	Uayeb.	9	3	"	7	3	"	5	3	"	3	8	"	12	1	"	12	8	"	10	8	"	6	13	"	8	13	"
13	7	18	Cumhu.	5	18	Mac.	3	18	Mol.	1	18	Zip.	12	3	"	13	10	"	8	3	"	6	3	"	4	8	"	2	8	"
14	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Pax.	4	6	Zac.	4	18	Xul.	2	18	Pop.	13	3	"	11	3	"
15	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	15	2	"	13	13	"	11	13	"	9	18	Kankin.	7	18	Chen.
16	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	16	11	"	9	8	"	7	8	"	5	13	"	3	13	"
17	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	11	18	Uo.	9	3	"	17	7	"	5	3	"	3	3	"	1	8	"	12	8	"
18	13	13	"	11	13	"	9	13	"	7	13	"	5	18	Muan.	18	3	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	"	8	3	"
19	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	19	12	"	10	13	"	8	18	Cumhu.	6	18	Mac.	4	18	Mol.

FIFTY-FOURTH GREAT CYCLE.

10TH CYCLE.]

10			11			12			13			14			15			16			17			18			19		
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.
20	13	Mol.	11	13	Zip.	9	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.	1	3	Muan.	12	3	Yax.	10	3	Tzec.	8	8	Cumhu.
1	9	"	7	8	"	5	13	"	3	13	"	1	13	"	10	18	"	10	18	Kankin.	8	18	Chen.	6	18	Zotz.	4	3	"
2	5	"	3	3	"	1	8	"	12	8	"	6	3	"	6	13	"	2	8	"	4	13	"	2	13	"	13	18	Kayab.
3	1	Yaxkin.	12	18	Uo.	10	3	"	8	3	"	4	3	"	2	8	"	11	3	"	13	8	"	11	8	"	9	13	"
4	10	"	8	13	"	6	18	Muan.	4	18	Yax.	2	18	Tzec.	11	3	Uayeb.	7	18	"	5	18	Mol.	3	18	Zip.	1	3	"
5	6	"	4	8	"	2	13	"	13	13	"	11	13	"	9	18	Cumhu.	7	18	Mae.	5	18	"	7	3	"	5	8	"
6	2	"	13	3	"	11	8	"	9	8	"	7	8	"	3	13	"	3	13	"	1	13	"	12	13	"	10	18	Pax.
7	11	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"	12	8	"	12	8	"	10	8	"	8	8	"	6	13	"
8	7	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	8	3	"	8	3	"	6	3	"	4	3	"	2	8	"
9	3	"	1	8	"	12	13	"	10	13	"	4	13	"	6	18	Kayab.	4	18	Ceh.	2	18	Yaxkin.	13	18	Uo.	11	3	"
10	12	"	10	3	"	8	8	"	6	8	"	3	8	"	13	13	"	13	13	"	11	13	"	9	13	"	7	18	Muan.
11	8	Tzec.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"	9	8	"	9	8	"	7	8	"	5	8	"	3	13	"
12	4	"	2	18	Cumhu.	13	18	Mae.	11	18	Mol.	9	18	Zip.	5	13	"	5	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"
13	13	"	11	13	"	9	13	"	7	13	"	3	13	"	8	13	"	10	13	"	8	13	"	6	13	"	4	18	Kankin.
14	9	"	7	8	"	5	8	"	12	3	"	1	8	"	6	8	"	2	8	"	4	8	"	2	8	"	13	13	"
15	5	Zotz.	3	3	"	1	3	"	10	3	"	10	3	"	8	8	"	6	8	"	4	8	"	11	3	"	9	8	"
16	1	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	2	18	"	2	18	"	13	3	"	7	3	"	5	8	"
17	10	"	8	13	"	6	13	"	4	13	"	2	13	"	3	13	"	11	13	"	9	13	"	7	13	"	5	3	"
18	6	"	4	8	"	2	8	"	13	8	"	11	8	"	9	18	Muan.	7	18	Yax.	5	18	Tzec.	3	18	Uayeb.	1	18	Mae.
19	2	Zip.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"

FIFTY-FOURTH GREAT CYCLE.

11TH CYCLE.]

	20			1			2			3			4			5			6			7			8			9		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	6	8	Mac.	4	8	Mol.	2	8	Zip	13	13	Zac.	11	13	Zac.	9	13	Xul.	7	13	Pop.	5	18	Kankin.	3	18	Chen.	1	18	Zotz.
1	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"
2	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"	10	3	"	12	3	Uayeb.	6	8	"	4	3	"	6	8	"
3	7	13	"	5	13	"	3	13	"	1	18	Yax.	12	18	Yax.	10	18	Tzec.	8	18	"	6	3	"	4	3	"	2	3	"
4	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	4	18	Cumhu.	4	18	Cumhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.
5	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	13	13	"	13	13	"	9	13	"	5	13	"	7	13	"
6	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	13	3	"	11	3	"	9	8	"	5	8	"	1	8	"	3	8	"
7	4	13	"	2	13	"	13	13	"	7	18	Chen.	9	18	Chen.	7	18	Zotz.	5	3	"	3	3	"	12	3	"	12	3	"
8	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Kankin.	11	18	"	10	18	Yaxkin.	8	18	Uo.
9	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	6	13	"	4	13	"	4	13	"
10	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	11	8	"
11	1	13	"	12	13	"	10	13	Cumhu.	8	18	Mol.	6	18	Mol.	4	18	Zip.	11	18	Pax.	9	13	Zac.	7	18	Xul.	5	18	Pop.
12	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	7	13	"	5	13	"	3	13	"	1	13	"
13	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	3	8	"	1	8	"	12	8	"	10	8	"
14	2	18	Chen.	13	18	Zotz.	11	18	"	7	3	"	7	3	"	10	3	"	12	3	"	8	3	"	6	3	"	4	3	"
15	11	13	"	9	13	"	7	18	Kayab.	5	18	Yaxkin.	3	18	Yaxkin.	1	18	Uo.	12	3	"	10	3	"	8	3	"	6	3	"
16	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	10	13	"	9	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.
17	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	4	13	"	4	13	"	2	13	"	13	13	"	11	18	Cumhu.
18	12	18	Mol.	10	18	Zip.	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"
19	8	13	"	6	13	"	4	18	Pax.	2	18	Xul.	13	18	Xul.	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"



10			11			12			13			14			15			16			17			18			19		
No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	12	Cumhu.	10	3	Mac.	8	3	Mol.	6	3	Zip.	4	8	Pax.	13	8	Xul.	11	8	Pop.	11	8	Pop.	9	13	Kankin.	7	13	Chen.
1	8	Kayab.	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	9	3	"	7	3	"	5	8	"	5	8	"	3	8	"
2	4	"	2	13	"	13	13	"	11	13	"	9	18	Muan.	5	18	Tzec.	3	3	Uayeb.	3	3	Uayeb.	1	3	"	12	3	"
3	13	"	11	8	"	9	8	"	7	8	"	5	13	"	1	13	"	12	18	Cumhu.	12	18	Cumhu.	10	18	Mac.	8	18	Mol.
4	9	"	7	3	"	5	3	"	3	3	"	1	8	"	10	8	"	8	13	"	8	13	"	6	13	"	4	13	"
5	5	Pax.	3	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"	6	3	"	6	3	"	4	8	"	2	8	"	13	8	"
6	1	"	12	13	"	10	13	"	8	13	"	6	18	Kankin.	2	18	Zotz.	13	3	"	13	3	"	11	3	"	9	3	"
7	10	"	8	8	"	6	8	"	4	8	"	2	13	"	11	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.
8	6	"	2	3	"	2	3	"	13	3	"	11	8	"	7	8	"	7	8	"	5	13	"	3	13	"	1	13	"
9	2	Muan.	13	18	Yax.	11	18	Tzec.	9	3	Uayeb.	7	3	"	3	3	"	3	3	"	1	8	"	12	8	"	10	8	"
10	11	"	9	13	"	7	13	"	5	18	Cumhu.	3	18	Mac.	12	18	Zip.	10	3	"	10	3	"	8	3	"	6	3	"
11	7	"	5	8	"	3	8	"	1	13	"	12	13	"	8	13	"	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.
12	3	"	1	3	"	10	3	"	10	8	"	8	8	"	4	8	"	2	13	"	2	13	"	13	13	"	11	13	"
13	12	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	4	3	"	13	3	"	13	3	"	11	8	"	9	8	"	7	8	"
14	8	"	6	13	"	4	13	"	2	18	Kayab.	13	18	Ceh.	13	18	Uo.	9	18	"	7	3	"	5	3	"	3	3	"
15	4	"	13	8	"	13	8	"	11	13	"	9	13	"	5	13	"	5	13	"	3	18	Muan.	1	18	Yax.	12	18	Tzec.
16	13	"	2	3	"	9	3	"	7	8	"	5	8	"	1	8	"	1	8	"	12	13	"	10	13	"	8	13	"
17	9	Mac.	7	18	Mol.	5	18	Zip.	3	3	"	1	3	"	10	3	"	10	3	"	8	8	"	6	8	"	4	8	"
18	5	"	3	13	"	1	13	"	12	18	Pax.	10	18	Zac.	6	18	Pop.	6	18	"	4	3	"	2	3	"	13	3	"
19	1	"	12	8	"	10	8	"	8	13	"	6	13	"	2	13	"	2	13	"	13	18	Kankin.	11	18	Chen.	9	18	Zotz.



FIFTY-FOURTH GREAT CYCLE.

12TH CYCLE.]

20	1			2			3			4			5			6			7			8			9		
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.			
20	5	13	Zotz.	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	6	3	Zac.	4	3	Xul.	2	3	Pep.	13	8	Kankin.
1	1	8	"	12	13	"	10	13	"	8	12	"	6	13	"	2	18	Yax.	13	18	Tzac.	11	3	Uayeb.	9	3	"
2	10	3	"	8	8	"	2	8	"	13	8	"	11	3	"	11	13	"	9	13	"	7	18	Cumhu.	5	18	Mac.
3	6	18	Zip.	4	3	"	2	3	"	13	3	"	11	3	"	7	8	"	5	8	"	3	13	"	1	13	"
4	2	13	"	13	18	Pax.	13	18	Zac.	9	18	Xul.	7	18	Pop.	3	3	"	1	3	"	12	8	"	10	8	"
5	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	12	18	Chen.	10	18	Zotz.	8	3	"	6	3	"
6	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	8	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.
7	3	18	Uo.	1	3	"	12	3	"	10	3	"	8	3	"	4	8	"	2	8	"	13	13	"	11	13	"
8	12	13	"	10	18	Muan.	8	18	Yax.	6	18	Tzac.	4	3	Uayeb.	13	3	"	2	3	"	9	8	"	7	8	"
9	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Cumhu.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"
10	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	5	13	"	3	13	"	1	18	Pax.	12	18	Zac.
11	13	18	Pop.	11	3	"	7	3	"	3	3	"	5	8	"	1	8	"	12	8	"	10	13	"	8	13	"
12	9	13	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	1	3	"	10	3	"	8	3	"	6	8	"	13	8	"
13	5	8	"	3	13	"	1	13	"	12	13	"	8	13	Kayab.	6	18	Yaxkin.	4	18	Uo.	2	3	"	13	3	"
14	1	3	"	12	8	"	10	8	"	2	8	"	6	13	"	2	13	"	13	13	"	11	18	Muan.	9	18	Yax.
15	10	3	Uayeb.	8	3	"	6	3	"	4	3	"	2	8	"	11	8	"	7	8	"	3	13	"	5	13	"
16	6	18	Cumhu.	4	18	Mac.	2	18	Mol.	13	18	Zip.	11	3	"	7	3	"	5	3	"	3	8	"	1	8	"
17	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Pax.	3	18	Xul.	1	18	Pop.	12	3	"	10	3	"
18	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	12	13	"	8	13	"	8	18	Kankin.	6	18	Chen.
19	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	8	8	"	6	8	"	4	13	"	2	13	"

ARCHAIC CHRONOLOGICAL CALENDAR.

12TH CYCLE.]

FIFTY-FOURTH GREAT CYCLE.

10			11			12			13			14			15			16			17			18			19		
			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.		
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.
20	11	Chen.	9	8	Zotz.	7	13	Kayab.	5	13	Ceh.	3	13	Yaxkin.	1	13	Uo.	12	18	Muan.	10	18	Yax.	8	18	Tzec.	6	3	Uayeb.
1	7	"	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Cumhu.
2	3	Mol.	1	18	Zip.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"
3	12	"	10	13	"	6	18	Pax.	4	18	Zac.	13	18	Xul.	2	18	Pop.	13	3	"	11	3	"	9	3	"	7	8	"
4	8	"	6	8	"	2	13	"	2	13	"	9	13	"	7	13	"	5	18	Kankin.	7	18	Chen.	5	18	Zotz.	3	3	"
5	4	"	2	3	"	13	8	"	11	8	"	9	8	"	5	8	"	7	13	"	3	13	"	1	13	"	12	18	Kayab.
6	13	Yaxkin.	11	18	Uo.	9	3	"	7	3	"	5	3	"	10	3	"	3	8	"	1	8	"	6	8	"	8	13	"
7	9	"	7	13	"	5	18	Muan.	3	18	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	"	8	3	"	6	3	"	4	8	"
8	5	"	3	8	"	1	13	"	12	13	"	6	13	"	4	13	Cumhu.	6	18	Mac.	4	18	Mol.	2	18	Zip.	13	3	"
9	1	"	12	3	"	8	8	"	8	8	"	6	8	"	11	8	"	2	13	"	13	13	"	7	8	"	5	13	"
10	10	Xul.	8	18	Pop.	6	3	"	4	3	"	2	3	"	9	3	"	11	8	"	9	8	"	11	8	"	9	18	Pax.
11	6	"	4	13	"	2	18	Kankin.	13	18	Chen.	11	18	Zotz.	13	3	"	7	3	"	5	3	"	3	3	"	1	8	"
12	2	"	13	8	"	9	13	"	9	13	"	7	13	"	11	13	"	5	18	Kayab.	3	18	Yaxkin.	12	18	Uo.	10	3	"
13	11	"	9	3	"	5	8	"	5	8	"	3	8	"	10	13	"	12	13	"	8	13	"	6	18	Muan.	6	18	"
14	7	Tzec.	3	18	Uayeb.	1	3	"	1	3	"	12	3	"	6	8	"	8	8	"	4	8	"	13	8	"	2	13	"
15	3	"	12	18	Cumhu.	10	3	"	10	3	"	8	3	"	4	3	"	6	18	Zac.	4	18	Xul.	9	18	Pop.	7	3	"
16	12	"	8	13	"	6	13	"	6	13	"	4	13	"	13	13	"	13	3	"	11	3	"	9	18	Pop.	7	3	"
17	8	"	6	8	"	2	8	"	2	8	"	9	8	"	7	8	"	2	18	Pax.	11	18	Xul.	9	18	Pop.	7	3	"
18	4	"	10	13	"	4	13	"	13	13	"	8	13	"	7	13	"	5	13	"	7	13	"	5	13	"	3	18	Kankin.
19	13	"	11	13	"	9	3	"	11	3	"	7	3	"	12	3	"	1	8	"	10	3	"	1	8	"	12	13	"
	13	"	11	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	12	3	"	3	3	"	1	3	"	12	3	"	8	8	"

FIFTY-FIFTH GREAT CYCLE.

20			1			2			3			4			5			6			7			8			9		
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.
20	4	Kankin.	2	3	Chen.	13	3	Zotz.	11	8	Kayab.	9	8	Ceh.	7	8	Yaxkin.	5	8	Uo.	3	13	Muan.	1	13	Yax.	12	13	Tzee.
1	13	Mac.	11	18	Mol.	9	18	Zip.	7	3	"	5	3	"	3	3	"	1	3	"	10	8	"	10	8	"	8	8	"
2	9	"	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	6	3	"	4	3	"
3	5	"	3	8	"	1	8	"	12	13	"	6	13	"	4	13	"	6	13	"	4	18	Kankin.	2	18	Chen.	13	18	Zotz.
4	1	"	12	3	"	10	3	"	8	8	"	6	8	"	13	8	"	2	8	"	11	13	"	11	13	"	9	13	"
5	10	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	"	2	3	"	11	3	"	11	3	"	7	8	"	7	8	"	5	8	"
6	6	"	4	13	"	2	13	"	13	18	Muan.	11	18	Yax.	5	18	Tzec.	9	18	Uayeb.	7	3	"	3	3	"	1	3	"
7	2	"	13	8	"	11	8	"	9	13	"	7	13	"	3	13	"	3	13	"	12	18	Mol.	12	18	Mol.	10	18	Zip.
8	11	"	9	3	"	7	3	"	5	8	"	3	8	"	10	3	"	12	8	"	6	8	"	4	8	"	2	8	"
9	7	Zac.	5	18	Xul.	3	18	Pop.	1	3	"	12	3	"	10	3	"	8	3	"	4	3	"	2	3	"	11	3	"
10	3	"	1	13	"	12	13	"	6	18	Kankin.	8	18	Chen.	2	18	Zotz.	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.
11	12	"	10	8	"	8	8	"	6	13	"	4	13	"	3	13	"	9	13	"	7	13	"	5	13	"	3	13	"
12	8	"	6	3	"	4	3	"	2	8	"	13	8	"	9	3	"	5	8	"	3	8	"	1	8	"	12	8	"
13	4	Yax.	2	18	Tzec.	13	3	Uayeb.	11	3	"	9	18	Mol.	7	18	Zip.	1	18	Pax.	12	3	"	10	3	"	8	3	"
14	13	"	11	13	"	9	18	Cumhu.	7	18	"	5	18	"	3	18	"	10	18	"	8	18	Zac.	6	18	Xul.	4	18	Pop.
15	9	"	7	8	"	5	13	"	3	8	"	1	8	"	12	8	"	6	13	"	4	13	"	2	13	"	13	13	"
16	5	"	3	3	"	1	8	"	12	3	"	10	3	"	8	3	"	2	8	"	13	8	"	11	8	"	9	8	"
17	1	Chen.	12	18	Zotz.	10	3	"	8	3	"	6	18	Yaxkin.	4	18	Uo.	11	3	"	9	3	"	7	3	"	5	3	"
18	10	"	8	13	"	6	18	Kayab.	4	18	Ceh.	2	18	"	11	13	"	7	18	Muan.	5	18	Yax.	3	18	Tzee.	1	3	Uayeb.
19	6	"	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	"	5	18	"	3	18	"	1	3	"



ARCHAIC CHRONOLOGICAL CALENDAR.

13TH CYCLE.]

FIFTY-FIFTH GREAT CYCLE.

10			11			12			13			14			15			16			17			18			19				
	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.	Name of month.		No. of the day Ahau.				
	Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.		Day of the month.	
20	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	4	18	Zip.	2	3	Kayab.	13	3	Ceh.	11	3	Yaxkin.	9	3	Uo.	7	8	Muan.	5	8	Yax.	20
1	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Pax.	9	18	Zac.	7	18	Xnl.	5	18	Pop.	3	3	"	1	3	"	1
2	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	Kankin.	10	18	Chen.	2
3	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	6	13	"	8	13	"	3
4	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"	8	18	Yax.	4	18	Tzec.	2	18	Uayeb.	13	3	"	4	18	"	4
5	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Muan.	6	18	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.	6
6	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	9	8	"	7	13	"	5	13	"	3	13	"	7
7	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	3	8	"	12	8	"	8
8	4	18	Pax.	2	18	Zac.	13	18	Xnl.	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	10	3	"	9
9	13	13	"	11	13	"	9	13	"	7	13	"	5	18	Kankin.	3	13	Chen.	1	18	Zotz.	12	3	"	12	3	"	8	3	"	10
10	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	10	13	"	6	13	"	10	13	Kayab.	6	18	Ceh.	4	18	Yaxkin.	11
11	5	3	"	3	3	"	1	3	"	12	3	"	6	3	"	8	3	"	2	3	"	13	8	"	4	13	"	9	8	"	12
12	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	18	Uayeb.	6	3	"	2	3	"	11	3	"	4	13	"	5	18	Pax.	3	18	Xnl.	13
13	10	13	"	8	13	"	6	13	"	4	13	Cumhu.	2	18	Mac.	11	13	Mol.	11	18	Zip.	9	3	"	7	3	"	10	3	"	5
14	6	8	"	4	8	"	2	8	"	13	8	"	11	13	"	7	8	"	7	13	"	5	18	"	12	13	"	8	13	"	14
15	2	3	"	13	3	"	11	3	"	9	3	"	7	8	"	3	8	"	12	3	"	1	13	"	10	8	"	6	8	"	15
16	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	3	18	"	3	3	"	10	8	"	12	3	"	1	13	"	8	8	"	9	13	"	16
17	7	13	"	5	13	"	3	13	"	1	13	Kayab.	12	18	Ceh.	6	13	Yaxkin.	8	18	Uo.	4	3	"	13	8	"	2	3	"	17
18	3	8	"	1	8	"	12	8	"	10	8	"	8	13	"	2	8	"	4	13	"	11	18	Muan.	13	18	Yax.	7	18	Tzec.	18
19	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	11	3	"	13	8	"	7	13	"	9	13	"	7	13	"	19



1st CYCLE.] FIFTY-FIFTH GREAT CYCLE.

20	1			2			3			4			5			6			7			8			9		
	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.			
20	3	8	Tzee.	12	13	Mac.	10	13	Mol.	8	13	Zip.	6	18	Pax.	4	18	Zac.	2	18	Xul.	13	18	Pop.	11	3	Muan.
1	12	3	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Kankin.
2	8	18	Zotz.	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"
3	4	13	"	13	18	Ceh.	11	18	Yaxkin.	9	18	Uo.	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"
4	13	8	"	9	13	"	7	13	"	5	13	"	3	18	Muan.	1	18	Yax.	12	18	Tzee.	10	3	Uayeb.	8	3	"
5	9	3	"	5	8	"	3	8	"	1	8	"	10	13	"	6	13	"	8	13	"	2	13	"	6	18	Mac.
6	5	18	Zip.	1	3	"	12	3	"	10	3	"	4	8	"	6	8	"	4	8	"	13	13	"	13	13	"
7	1	13	"	10	18	Zac.	8	18	Xul.	6	18	Pop.	2	3	"	2	3	"	13	3	"	11	8	"	7	8	"
8	10	8	"	6	13	"	4	13	"	2	13	"	12	18	Kankin.	11	18	Chen.	9	18	Zotz.	3	18	Kayab.	5	3	"
9	6	3	"	2	8	"	13	8	"	11	8	"	9	12	"	7	12	"	5	13	"	12	13	"	1	18	Ceh.
10	2	18	Uo.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	10	3	"	6	8	"
11	11	13	"	7	18	Yax.	5	18	Tzee.	3	3	Uayeb.	1	3	"	12	3	"	10	3	"	8	8	"	4	8	"
12	7	8	"	3	13	"	1	13	"	12	18	Cumhu.	10	13	Mac.	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"
13	3	3	"	12	8	"	6	8	"	8	13	"	2	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.
14	12	18	Pop.	10	3	"	6	3	"	4	8	"	11	8	"	13	8	"	11	8	"	9	13	"	7	13	"
15	8	13	"	8	3	"	2	3	"	13	3	"	9	3	"	9	3	"	7	3	"	5	8	"	3	8	"
16	4	8	"	13	18	Chen.	11	18	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	3	"	12	3	"
17	13	3	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Muan.	8	18	Yax.
18	9	3	Uayeb.	7	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"
19	5	18	Cumhu.	3	18	Mol.	12	18	Zip.	10	3	"	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"

FIFTY-FIFTH GREAT CYCLE.

1st CYCLE.]

10			11			12			13			14			15			16			17			18			19				
No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.					
20	9	3	Yax.	7	3	Tzec.	5	8	Cumhu.	3	8	Mac.	1	8	Mol.	12	8	Zip.	10	13	Pax.	8	13	Zac.	6	13	Xul.	4	13	Pop.	20
1	5	18	Chen.	3	18	Zotz.	1	3	"	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	8	"	1
2	1	13	"	12	13	"	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	3	"	13	3	"	11	3	"	9	3	"	2
3	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Muan.	9	18	Yax.	7	18	Tzec.	5	3	Uayeb.	3
4	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Cumhu.	4
5	2	18	Mol.	13	18	Zip.	11	3	"	7	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	5
6	11	13	"	9	13	"	7	18	Pax.	5	18	Zac.	3	18	Xul.	12	3	Pop.	12	3	"	10	3	"	8	3	"	6	8	"	6
7	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	8	8	"	3	18	Kankin.	6	18	Chen.	4	18	Zotz.	2	3	"	7
8	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	11	18	Kayab.	8
9	12	18	Yaxkin.	10	18	Uo.	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	9
10	8	13	"	6	13	"	4	18	Muan.	2	18	Yax.	13	18	Tzec.	11	3	Uayeb.	9	3	"	7	3	"	5	3	"	3	8	"	10
11	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	5	8	"	12	13	"	3	18	Mol.	1	18	Zip.	12	3	"	11
12	13	3	"	11	3	"	9	8	"	7	8	"	7	8	"	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Pax.	12
13	9	18	Xul.	7	18	Pop.	5	3	"	3	3	"	3	3	"	1	8	"	10	8	"	8	8	"	6	8	"	4	13	"	13
14	5	13	"	3	13	"	1	18	Kankin.	12	18	Chen.	10	18	Zotz.	8	3	"	6	3	"	4	3	"	13	18	Yaxkin.	11	8	"	14
15	1	8	"	12	8	"	10	13	"	6	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	11	18	Uo.	9	3	"	15
16	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	11	13	"	11	13	"	9	13	"	7	13	"	3	8	"	16
17	6	18	Tzec.	4	18	Uayeb.	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	17
18	2	13	"	13	18	Cumhu.	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"	3	3	"	12	3	"	10	8	"	18
19	11	8	"	9	13	"	7	13	"	3	13	"	3	13	"	3	18	Pax.	12	18	Zac.	10	18	Xul.	8	18	Pop.	6	3	"	19

20			1			2			3			4			5			6			7			8			9				
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	2	18	Kankin.	13	18	Chen.	11	18	Zetz.	9	3	Mac.	7	3	Mac.	5	3	Mol.	3	3	Zip.	1	8	Pax.	12	8	Zac.	10	8	Xul.	20
1	11	13	"	9	13	"	7	13	"	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	12	18	Uo.	10	3	"	8	3	"	6	3	"	1
2	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	6	8	"	8	13	"	6	18	Muan.	4	18	Yax.	2	18	Tzec.	2
3	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	2	8	"	4	8	"	2	13	"	13	13	"	11	13	"	3
4	12	18	Mac.	10	18	Mol.	8	18	Zip.	6	18	"	4	3	"	11	8	"	13	3	"	9	8	"	9	8	"	7	8	"	4
5	6	13	"	6	13	"	4	13	"	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"	5
6	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	3	18	Kankin.	10	13	Chen.	12	18	Zetz.	6
7	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	12	13	"	6	13	"	8	13	"	7
8	9	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	3	3	"	12	3	"	8	12	"	10	3	"	8	8	"	6	8	"	4	8	"	8
9	5	13	"	3	13	"	1	13	"	12	18	Muan.	10	18	Yax.	8	18	Tzec.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"	9
10	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.	10
11	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	11
12	6	18	Zac.	4	18	Xul.	2	18	Pop.	13	3	"	11	3	"	9	3	"	3	3	"	7	8	"	3	8	"	12	3	"	12
13	2	13	"	13	13	"	11	13	"	9	18	Kankin.	7	18	Chen.	5	18	Zetz.	5	18	"	1	3	"	5	18	"	10	3	"	13
14	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	12	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	14
15	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	15
16	3	18	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	"	8	3	"	6	3	"	4	8	"	13	8	"	2	8	"	11	8	"	16
17	12	13	"	10	13	"	8	18	Cumhu.	6	18	Mac.	4	18	Mol.	2	18	Zip.	13	3	"	9	3	"	7	3	"	5	18	"	17
18	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	9	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.	18
19	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	19



	10			11			12			13			14			15			16			17			18			19			
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.				
20	8	8	Pop.	6	13	Kankin.	4	13	Chen.	2	13	Zotz.	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	5	3	Pax.	3	3	Zac.	20
1	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	5	13	"	7	13	"	3	13	"	1	18	Muan.	12	18	Yax.	1
2	13	3	Uayeb.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	3	8	"	10	13	"	6	8	"	8	13	"	2
3	9	18	Cumhu.	7	18	Mac.	5	18	Mol.	3	18	Zip.	1	3	"	10	3	"	12	3	"	8	3	"	4	8	"	4	8	"	3
4	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Pax.	6	18	Xul.	6	18	Xul.	4	18	Pop.	2	3	"	2	3	"	4
5	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	2	13	"	4	13	"	11	13	"	13	13	Kankin.	9	18	Chen.	5
6	10	3	"	8	3	"	6	3	"	4	3	"	2	8	"	11	8	"	13	8	"	7	8	"	9	8	"	3	8	"	6
7	6	18	Kayab.	4	18	Ceh.	2	18	Yaxkin.	13	18	Uo.	11	3	"	7	3	"	9	3	"	5	3	"	3	8	"	10	3	"	7
8	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Muan.	3	18	Yax.	5	18	Tzac.	1	3	Uayeb.	12	3	"	12	3	"	8
9	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	12	13	"	1	13	"	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	9
10	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	8	8	"	10	8	"	6	13	"	4	13	"	2	13	"	10
11	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	10	6	"	6	3	"	4	3	"	13	8	"	11	8	"	11
12	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Kankin.	13	18	Chen.	2	18	Zotz.	11	3	"	7	3	"	9	3	"	12
13	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	13	13	"	11	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	13
14	4	3	"	2	3	"	11	3	"	7	3	"	9	8	"	5	8	"	7	8	"	3	13	"	3	13	"	12	13	"	14
15	13	18	Muan.	11	18	Yax.	9	18	Tzac.	7	3	Uayeb.	5	3	"	1	3	"	12	3	"	10	8	"	12	8	"	8	8	"	15
16	9	13	"	7	13	"	5	13	"	10	18	Cumhu.	1	18	Mac.	6	18	Mol.	12	18	Zip.	8	3	"	4	18	Pax.	2	18	Zac.	16
17	5	8	"	3	8	"	1	8	"	8	8	"	10	13	"	6	13	"	8	13	"	4	18	"	13	13	"	11	13	"	17
18	1	3	"	12	3	"	10	3	"	4	3	"	6	8	"	2	8	"	4	8	"	13	13	"	7	8	"	9	13	"	18
19	10	18	Kankin.	8	18	Chen.	6	18	Zotz.	4	3	"	2	3	"	11	3	"	13	3	"	9	8	"	7	8	"	5	8	"	19



ARCHAIC CHRONOLOGICAL CALENDAR.

3RD CYCLE.] FIFTY-FIFTH GREAT CYCLE.

	20			1			2			3			4			5			6			7			8			9			
	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.	No. of the day Aban.	Day of the month.	Name of month.				
20	1	3	Xul.	12	3	Pop.	10	8	Kankin.	8	8	Chen.	6	8	Zotz.	4	13	Kayab.	2	13	Ceh.	13	13	Yaxkin.	11	13	Uo.	9	18	Muan.	20
1	10	18	Tzec.	8	3	Uayeb.	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	8	"	5	13	"	1
2	6	13	"	4	18	Cumhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	5	3	"	3	3	"	1	8	"	2
3	2	8	"	13	13	"	11	13	"	9	13	"	7	13	"	3	18	Pax.	5	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"	3
4	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	12	13	"	1	13	"	10	13	"	8	13	"	6	18	Kankin.	4
5	7	18	Zotz.	5	3	"	3	3	"	1	3	"	12	3	"	6	8	"	10	8	"	6	8	"	4	8	"	2	13	"	5
6	3	13	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	4	18	Muan.	13	18	Yax.	11	18	Tzec.	9	3	"	7	8	"	6
7	12	8	"	10	13	"	6	13	"	2	8	"	13	8	"	9	13	"	11	13	"	7	13	"	5	18	Cumhu.	3	18	Mac.	8
8	8	3	"	4	8	"	4	8	"	2	8	"	13	3	"	9	3	"	7	8	"	3	8	"	1	13	"	12	13	"	9
9	4	18	Zip.	2	3	"	13	3	"	11	3	"	9	3	"	5	18	Pop.	3	3	"	12	3	"	10	8	"	8	8	"	10
10	13	13	"	11	18	Pax.	9	18	Zac.	7	18	Xul.	5	18	"	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	4	3	"	11
11	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	"	6	13	"	4	13	"	2	18	Kayab.	13	18	Ceh.	12
12	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	8	13	"	7	8	"	13	8	"	11	13	"	9	13	"	13
13	1	18	Uo.	12	3	"	10	3	"	8	3	"	6	3	"	11	3	"	7	18	Mol.	5	18	Zip.	3	3	"	4	8	"	14
14	10	13	"	8	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	13	3	"	9	18	Mac.	11	3	"	7	8	"	5	8	"	15
15	6	8	"	4	13	"	2	13	"	2	13	"	11	18	Cumhu.	9	18	"	3	13	"	7	18	"	5	13	"	12	18	Zac.	16
16	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	12	8	"	10	8	"	8	13	"	6	13	"	17
17	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"	12	8	"	8	3	"	10	8	"	6	8	"	2	8	"	18
18	7	13	"	5	18	Kankin.	3	18	Chen.	1	18	Zotz.	12	3	"	10	3	"	6	3	"	8	3	"	4	8	"	11	3	"	19
19	3	8	"	1	13	"	12	13	"	10	13	"	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	11	3	"	

	10			11			12			13			14			15			16			17			18			19		
	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.
20	7	18	Yax.	5	18	Tzec.	3	3	Uayeb.	1	3	Kankin.	12	3	Chen.	10	3	Zotz.	8	8	Kayab.	6	8	Ceh.	4	8	Yaxkin.	2	8	Uo.
1	3	13	"	1	13	"	12	18	Cumhu.	10	18	Mac.	8	18	Mol.	6	18	Zip.	3	3	"	2	3	"	13	3	"	11	3	"
2	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.
3	8	3	"	6	3	"	13	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"
4	4	18	Chen.	2	18	Zotz.	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"
5	13	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	10	1	"	12	3	"	10	3	"	8	3	"
6	9	8	"	7	8	"	12	13	"	3	13	"	1	13	"	12	13	"	6	18	Muan.	8	18	Yax.	6	18	Tzec.	4	18	Uayeb.
7	5	3	"	3	3	"	10	8	"	1	8	"	10	8	"	8	8	"	2	13	"	4	13	"	2	13	"	13	18	Cumhu.
8	1	18	Mol.	12	18	Zip.	10	3	"	6	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"
9	10	13	"	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.	13	18	Pop.	11	3	"	9	3	"	7	3	"	5	8	"
10	6	8	"	4	8	"	13	13	"	13	13	"	11	13	"	9	13	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	1	18	"
11	2	3	"	13	3	"	11	8	"	11	8	"	7	8	"	5	8	"	3	13	"	10	13	"	1	13	"	6	13	Kayab.
12	11	18	Yaxkin.	9	18	Uo.	7	3	"	3	18	Yax.	12	18	Tzec.	10	3	Uayeb.	12	8	"	6	8	"	10	8	"	2	13	"
13	7	13	"	5	13	"	12	13	"	10	13	"	8	13	"	6	18	Cumhu.	8	3	"	6	3	"	4	3	"	13	18	Zip.
14	3	8	"	1	8	"	10	8	"	6	8	"	4	8	"	2	13	"	4	18	Mac.	2	18	Mol.	11	13	"	7	18	Pax.
15	12	3	"	10	3	"	8	13	"	2	13	"	4	13	"	11	8	"	13	13	"	7	13	"	5	13	"	3	13	"
16	8	18	Xul.	6	18	Pop.	4	18	"	1	18	Chen.	11	18	Zotz.	9	18	"	9	8	"	7	8	"	5	8	"	3	8	"
17	4	13	"	2	13	"	13	3	"	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"
18	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Kayab.	1	18	Ceh.	12	18	Yaxkin.	10	18	Uo.	8	18	"
19	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Muan.

20			1			2			3			4			5			6			7			8			9		
	Name of month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.	No. of the day Ahau.	Name of month.		Day of the month.	No. of the day Ahau.	Name of month.		Day of the month.	No. of the day Ahau.	Name of month.		Day of the month.	No. of the day Ahau.	Name of month.		Day of the month.	No. of the day Ahau.	Name of month.		Day of the month.	No. of the day Ahau.	
20	13	Muan.	11	13	Yax.	9	13	Tzec.	7	18	Cumhu.	5	18	Mac.	20	3	18	Mol.	1	18	Zip.	12	3	Kayab.	10	3	Ceh.	3	Yaxkin.
1	9	"	7	8	"	5	8	"	3	13	"	1	13	"	1	10	13	"	10	13	"	8	18	Pax.	6	18	Zac.	4	Xul.
2	5	"	3	3	"	1	3	"	12	8	"	10	8	"	2	6	8	"	6	8	"	4	13	"	2	13	"	13	13
3	1	Kankin.	12	18	Chen.	10	18	Zotz.	8	3	"	6	3	"	3	4	3	"	2	3	"	13	8	"	11	8	"	9	8
4	10	"	8	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.	4	13	18	Yaxkin.	11	18	Uo.	9	3	"	7	3	"	5	3
5	6	"	4	8	"	2	8	"	13	13	"	11	13	"	5	9	13	"	7	13	"	5	18	Muan.	3	18	Yax.	1	Tzec.
6	2	"	13	3	"	11	3	"	9	8	"	7	8	"	6	5	8	"	3	8	"	1	13	"	12	13	"	10	13
7	11	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"	7	1	3	"	12	3	"	10	8	"	8	8	"	6	8
8	7	"	3	13	"	3	13	"	1	18	Pax.	12	18	Zac.	8	10	18	Xul.	8	18	Pop.	6	3	"	4	3	"	2	3
9	3	"	1	8	"	12	8	"	6	13	"	8	13	"	9	6	13	"	4	13	"	2	18	Kankin.	13	18	Chen.	11	18
10	12	"	10	3	"	8	3	"	10	8	"	4	8	"	10	2	8	"	13	8	"	11	13	"	9	13	"	7	13
11	8	Ceh.	6	18	Yaxkin.	4	18	Uo.	11	3	"	13	3	"	11	11	3	"	9	3	"	7	8	"	5	8	"	3	8
12	4	"	2	13	"	13	13	"	11	18	Muan.	9	18	Yax.	12	7	18	Tzec.	5	3	Uayeb.	3	3	"	1	3	"	12	3
13	13	"	11	8	"	9	8	"	7	13	"	5	13	"	13	3	13	"	1	18	Cumhu.	12	18	Mac.	10	18	Mol.	8	18
14	9	"	7	3	"	5	3	"	3	8	"	1	8	"	10	13	8	"	10	13	"	8	13	"	6	13	"	4	13
15	5	Zac.	3	18	Xul.	1	18	Pop.	12	3	"	10	3	"	6	8	3	"	6	8	"	4	8	"	2	8	"	13	8
16	1	"	12	13	"	10	13	"	8	13	Kankin.	6	18	Chen.	16	4	18	Zotz.	2	3	"	13	3	"	11	3	"	9	3
17	10	"	6	8	"	6	8	"	4	13	"	2	13	"	17	13	13	"	11	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	5	18
18	6	"	4	3	"	2	3	"	13	8	"	11	8	"	18	9	8	"	7	13	"	5	13	"	3	13	"	1	13
19	2	Yax.	13	18	Tzec.	11	3	Uayeb.	9	3	"	7	3	"	19	5	3	"	3	8	"	1	8	"	12	8	"	10	8



10				11				12				13				14				15				16				17				18				19			
		Name of month.		No. of the day Aban.		Day of the month.		Name of month.		No. of the day Aban.		Day of the month.		Name of month.		No. of the day Aban.		Day of the month.		Name of month.		No. of the day Aban.		Day of the month.		Name of month.		No. of the day Aban.		Day of the month.		Name of month.							
20	6	Uo.	3	4	Muan.	2	8	Yax.	13	8	Tzec.	11	13	Cumhu.	20	7	Mol.	5	13	Zip.	3	18	Pax.	1	18	Zac.	20	1	18	13	18	Zac.							
1	2	Pop.	18	13	"	11	3	"	9	3	"	7	8	"	1	3	"	12	13	"	12	13	"	10	13	"	1	10	13	13	13	"							
2	11	"	13	8	Kankin.	7	18	Chen.	5	18	Zotz.	3	3	"	2	12	"	10	3	"	8	8	"	6	8	"	2	6	8	8	8	"							
3	7	"	5	13	"	3	13	"	1	13	"	12	18	Kayab.	3	8	Yaxkin.	6	18	Uo.	4	3	"	4	3	"	2	4	3	3	3	"							
4	3	"	1	8	"	12	8	"	10	8	"	8	13	"	4	13	"	2	13	"	13	18	Muan.	11	18	Yax.	4	11	18	13	18	Yax.							
5	12	Uayeb.	3	3	"	8	3	"	6	3	"	4	8	"	13	8	"	13	8	"	11	8	"	9	13	"	7	7	13	13	13	"							
6	8	Cumhu.	18	13	Mac.	4	18	Mol.	2	18	Zip.	13	3	"	9	3	"	9	3	"	7	3	"	5	8	"	3	5	8	8	8	"							
7	4	"	13	8	"	13	13	"	11	13	"	9	18	Pax.	7	18	Zac.	5	18	Pop.	3	18	"	10	18	Kankin.	8	10	18	13	18	Chen.							
8	13	"	11	8	"	9	8	"	7	8	"	5	13	"	12	13	"	1	13	"	12	13	"	6	13	"	4	4	13	13	13	"							
9	9	"	7	3	"	5	3	"	3	3	"	1	8	"	10	8	"	10	8	"	8	8	"	2	8	"	4	13	8	13	13	"							
10	5	Kayab.	18	13	Ceh.	1	18	Yaxkin.	12	18	Uo.	10	3	"	6	3	"	2	18	Tzec.	13	3	"	2	8	"	13	13	8	13	13	"							
11	1	"	12	13	"	8	13	"	6	13	"	2	18	Muan.	11	13	"	11	13	"	9	18	"	11	3	"	5	9	3	13	13	"							
12	10	"	8	8	"	4	8	"	4	8	"	2	13	"	11	8	"	7	8	"	3	13	"	7	13	"	3	10	13	13	13	"							
13	6	"	4	3	"	13	3	"	9	3	"	11	3	"	7	3	"	12	3	"	3	13	"	12	8	"	10	10	8	13	13	"							
14	2	Pax.	18	13	Zac.	13	18	Xul.	11	18	Pop.	7	3	"	3	3	"	12	18	Zip.	3	18	"	7	18	Mac.	5	5	8	13	13	"							
15	11	"	9	13	"	7	13	"	5	13	"	3	18	Kankin.	15	13	Zotz.	12	18	"	10	3	"	8	3	"	6	6	3	13	13	"							
16	7	"	3	8	"	1	8	"	10	8	"	8	13	"	12	13	"	8	13	"	6	18	Ceh.	4	18	Yaxkin.	2	2	18	13	13	Yaxkin.							
17	3	"	12	3	"	10	3	"	8	3	"	4	8	"	8	3	"	4	8	"	2	13	"	13	13	"	11	11	13	13	13	"							
18	12	Muan.	10	3	"	6	3	"	9	3	"	13	3	"	9	3	"	13	3	"	11	8	"	9	8	"	7	7	8	8	8	"							
19	8	"	6	13	"	2	13	"	2	13	"	13	18	Mac.	19	18	Zip.	9	18	"	7	3	"	5	3	"	3	3	3	3	3	"							



20	1			2			3			4			5			6			7			8			9						
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.							
20	12	18	Xul.	10	18	Pop.	8	3	Muan.	6	3	Yax.	4	3	Tzec.	20	2	8	Cumhu.	13	8	Mac.	11	8	Mol.	9	8	Zip.	7	13	Pax.
1	8	13	"	6	13	"	4	18	Kankin.	2	18	Chen.	13	18	Zotz.	1	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"
2	4	8	"	2	8	"	13	3	"	11	13	"	9	13	"	2	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"
3	13	3	"	11	3	"	9	8	"	5	8	"	7	8	"	3	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Muan.
4	9	18	Tzec.	7	3	Uayeb.	5	3	"	1	3	"	3	3	"	4	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"
5	5	13	"	3	18	Cumhu.	1	18	Mac.	12	18	Mol.	10	18	Zip.	6	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"
6	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	7	13	13	Pax.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"
7	10	3	"	8	8	"	6	8	"	2	8	"	2	8	"	8	9	8	"	11	13	"	9	13	"	7	13	"	5	18	Kankin.
8	6	18	Zotz.	4	3	"	2	3	"	13	3	"	13	3	"	9	5	3	"	7	3	"	5	3	"	3	8	"	1	13	"
9	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.	10	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	3	Uayeb.	6	3	"
10	11	8	"	9	13	"	7	13	"	3	13	"	3	13	"	11	10	13	"	12	18	"	6	13	"	13	13	"	4	18	Cumhu.
11	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	12	6	8	"	3	13	"	2	8	"	9	8	"	7	8	"
12	3	18	Zip.	1	3	"	12	3	"	10	3	"	4	18	Pop.	13	2	3	"	13	3	"	11	3	"	7	8	"	3	3	"
13	12	13	"	10	18	Pax.	8	18	Zac.	6	18	Xul.	6	18	Yax.	14	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	5	3	"	12	18	Ceh.
14	8	8	"	6	13	"	4	13	"	13	8	"	9	8	"	15	7	13	"	5	13	"	3	13	"	12	8	"	8	13	"
15	4	3	"	2	8	"	13	3	"	11	8	"	11	8	"	16	3	8	"	1	8	"	12	8	"	6	8	"	4	8	"
16	13	18	Uo.	11	3	"	9	3	"	5	3	"	7	3	"	17	12	3	"	10	3	"	8	3	"	10	3	"	6	8	"
17	9	13	"	7	18	Muan.	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	18	8	18	Mac.	6	18	Mol.	4	18	Zip.	2	3	"	13	3	"
18	5	8	"	3	13	"	1	13	"	10	13	"	12	13	"	19	4	13	"	2	13	"	13	13	"	11	18	Pax.	9	18	Zac.
19	1	3	"	12	8	"	10	8	"	8	8	"	8	8	"																

FIFTY-FIFTH GREAT CYCLE.

5TH CYCLE.]

10				11				12				13				14				15				16				17				18				19			
		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.			
20	5	13	Zac.	3	13	Xul.	1	13	Pop.	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	Cumhu.	4	3	Mac.	2	3	Mol.	13	3	Zip.	20								
1	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	2	18	Kayab.	13	18	Ceh.	11	18	Yaxkin.	9	18	Uo.	1								
2	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	2	13	2						
3	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	10	3	3						
4	2	13	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.	3	3	Zip.	3	3	"	3	3	"	12	3	"	12	3	"	6	18	Pop.	4					
5	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.	5								
6	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	4	13	"	4	13	"	2	13	6						
7	3	18	Chen.	1	18	Zotz.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	13	3	"	2	8	"	13	8	"	11	8	7						
8	12	13	"	10	13	"	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	2	13	Uo.	2	18	"	9	18	Yax.	7	18	Tzec.	5	18	Uayeb.	3	3	9						
9	8	8	"	6	8	"	4	13	"	4	13	"	13	13	"	11	13	"	7	8	"	3	13	"	12	8	"	1	13	Cumhu.	12	18	10						
10	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	5	8	"	1	8	"	5	8	"	8	8	"	6	8	"	10	8	8	11					
11	13	18	Mol.	7	13	Zip.	5	18	Pax.	3	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"	10	3	"	8	3	"	4	3	"	6	3	12	11					
12	9	13	"	3	8	"	1	13	"	1	13	"	10	13	"	8	13	"	6	18	Kankin.	4	18	Chen.	2	18	Zotz.	11	13	"	7	18	Kayab.	13					
13	5	8	"	12	5	"	10	8	"	8	3	"	6	8	"	2	13	"	2	13	"	2	13	"	13	13	"	11	13	"	5	18	Zip.	2					
14	1	3	"	12	3	"	6	3	"	4	3	"	2	3	"	4	8	"	2	13	"	11	8	"	9	8	"	7	8	"	3	3	"	11					
15	10	18	Yaxkin.	6	13	Uo.	2	18	Muan.	13	3	Yax.	9	18	Tzec.	7	3	Uayeb.	7	3	"	5	3	"	5	3	"	12	18	Zip.	1	18	Mol.	12					
16	6	13	"	4	13	"	11	13	"	9	13	"	7	13	"	3	13	"	3	18	Mac.	3	18	Mol.	1	18	Zip.	10	13	"	8	13	Pax.	17					
17	2	8	"	13	8	"	7	8	"	5	8	"	3	8	"	1	8	"	10	13	"	6	8	"	10	13	"	6	8	"	4	8	"	18					
18	11	3	"	9	3	"	8	13	"	6	13	"	12	13	"	4	13	"	8	13	"	12	13	"	8	13	"	4	13	"	2	13	"	19					

6TH CYCLE.] FIFTY-FIFTH GREAT CYCLE.

20				1			2			3			4			5			6			7			8			9			
	Name of month.			No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.				
	No. of the day Ahau.	Day of the month.	Name of month.																												
20	11	8	Pax.	9	8	Zac.	7	8	Xul.	5	8	Pop.	3	13	Kankin.	20	1	13	Chen.	12	13	Zotz.	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.
1	7	3	"	5	3	"	3	3	"	12	8	"	12	8	"	1	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"
2	3	18	Muan.	1	18	Yax.	12	18	Tzec.	10	18	Uayeb.	4	18	Mac.	2	6	3	"	4	3	"	11	3	"	13	8	"	11	8	"
3	12	13	"	10	13	"	8	13	"	6	18	Cumhu.	13	18	Zip.	3	2	18	Mol.	13	18	Zip.	7	18	"	9	3	"	7	3	"
4	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"	4	11	13	"	9	13	"	3	18	Pax.	5	18	Zac.	3	18	Xul.
5	4	3	"	2	3	"	13	3	"	11	8	"	9	8	"	5	7	8	"	3	8	"	12	8	"	10	8	"	8	8	"
6	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	13	Kayab.	1	18	Ceh.	7	12	18	Yaxkin.	10	18	Uo.	4	18	Muan.	2	18	Yax.	13	18	Tzec.
7	9	13	"	3	13	"	5	13	"	12	13	"	10	13	"	8	3	13	"	6	13	"	13	13	"	11	13	"	6	13	"
8	5	8	"	12	8	"	8	8	"	4	8	"	6	8	"	9	4	8	"	2	8	"	13	13	"	9	8	"	7	8	"
9	1	3	"	10	3	"	4	3	"	11	3	"	13	3	"	10	13	3	"	11	3	"	7	8	"	5	8	"	5	8	"
10	10	18	Mac.	8	18	Mol.	6	18	Zip.	13	18	Pax.	11	18	Zac.	11	9	18	Xul.	7	18	Pop.	5	18	"	1	18	Kankin.	12	18	Chen.
11	6	13	"	4	13	"	2	13	"	13	13	"	7	13	"	12	5	13	"	3	13	"	1	18	"	10	18	"	10	18	Zotz.
12	2	8	"	13	8	"	11	8	"	5	8	"	9	8	"	13	1	8	"	12	8	"	3	13	"	8	13	"	6	13	"
13	11	3	"	9	3	"	7	3	"	10	3	"	5	3	"	14	10	3	"	8	3	"	6	8	"	10	8	"	4	8	"
14	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	18	"	10	18	Yax.	4	6	18	Tzec.	4	3	Uayeb.	2	18	"	13	3	"	11	3	"
15	3	13	"	1	13	"	12	13	"	6	13	Muan.	8	13	"	15	2	13	"	13	18	Cumhu.	11	18	Mac.	9	18	Mol.	7	18	Zip.
16	12	8	"	10	8	"	8	8	"	4	13	"	6	13	"	16	9	13	"	9	13	"	7	13	"	5	13	"	3	13	"
17	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	17	11	8	"	7	8	"	3	8	"	1	8	"	12	8	"
18	4	18	Zac.	2	18	Xul.	13	18	Pop.	11	18	"	7	18	Chen.	18	7	3	"	5	8	"	3	8	"	10	8	"	8	8	"
19	13	13	"	11	13	"	9	13	"	7	18	Kankin.	5	18	"	19	1	3	Zotz.	1	3	"	12	3	"	10	3	"	10	3	"



10				11			12			13			14			15			16			17			18			19		
	Name of month.		No. of the day Ahan.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.	No. of the day Ahan.	Day of the month.	Name of month.			
20	4	18	Uo.	2	3	Pax.	13	3	Zac.	11	3	Xul.	9	3	Pop.	5	8	Chen.	5	8	Chen.	3	8	Zotz.	1	13	Kayab.	12	13	Ceh.
1	13	13	"	11	18	Muan.	9	18	Yax.	7	18	Tzac.	5	3	Uayeb.	1	3	"	1	3	"	10	8	"	10	8	"	8	8	"
2	9	8	"	7	13	"	3	13	"	3	13	"	1	18	Cumhu.	10	18	Mol.	10	18	Mol.	8	18	Zip.	6	3	"	6	3	"
3	5	3	"	3	8	"	1	8	"	12	8	"	6	13	"	6	13	"	6	13	"	4	13	"	4	13	Pax.	13	18	Zac.
4	1	18	Pop.	12	3	"	8	3	"	8	3	"	6	8	"	2	3	"	2	8	"	13	8	"	11	13	"	9	13	"
5	10	13	"	8	18	Chen.	6	18	Chen.	4	18	Zotz.	2	3	"	11	3	"	11	3	"	9	3	"	9	3	"	5	8	"
6	6	8	"	4	13	Kankin.	11	13	"	13	13	"	7	18	Kayab.	7	18	Yaxkin.	7	18	Yaxkin.	3	18	Uo.	3	3	"	1	3	"
7	2	3	"	13	8	"	9	8	"	5	8	"	7	13	"	3	13	"	3	13	"	12	18	Muan.	10	18	Yax.	6	13	Yax.
8	11	3	Uayeb.	9	3	"	7	3	"	1	3	"	3	8	"	10	8	"	12	8	"	8	13	"	8	13	"	6	13	"
9	7	18	Cumhu.	5	18	Mac.	3	18	Mol.	1	18	Zip.	12	3	"	6	18	Zac.	8	18	Zac.	6	18	"	2	18	"	2	8	"
10	3	13	"	1	13	"	10	13	"	10	13	"	8	18	Pax.	4	18	Xul.	4	18	Xul.	13	13	"	11	13	"	11	3	"
11	12	8	"	10	8	"	6	8	"	6	8	"	4	13	"	13	8	"	13	8	"	7	8	"	5	13	Kankin.	7	18	Chen.
12	8	3	"	6	3	"	4	3	"	2	3	"	13	3	"	9	3	"	5	3	"	3	8	"	3	8	"	3	13	"
13	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	11	18	Uo.	9	3	"	5	18	Tzac.	1	18	Tzac.	12	3	"	12	3	"	10	3	"
14	13	13	"	11	13	"	9	13	"	7	13	"	5	18	Muan.	10	13	"	10	13	"	8	18	Uayeb.	6	18	Mac.	4	18	Mol.
15	9	8	"	7	8	"	5	8	"	3	8	"	10	8	"	6	8	"	6	8	"	4	13	"	2	13	"	13	13	"
16	5	3	"	3	3	"	1	3	"	2	3	"	6	13	"	4	13	"	2	8	"	13	8	"	11	8	"	9	8	"
17	1	18	Pax.	12	18	Zac.	8	18	Xul.	4	18	Pop.	2	18	Kayab.	2	18	Chen.	2	18	Chen.	13	8	"	13	8	"	5	3	"
18	10	13	"	8	13	"	6	13	"	4	13	"	2	18	Kankin.	7	13	"	11	18	Zotz.	9	3	"	9	3	"	7	3	"
19	6	8	"	4	8	"	2	8	"	9	13	"	11	13	"	7	13	"	7	13	"	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.



20				1			2			3			4			5			6			7			8			9						
	Name of month.		No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.	Name of month.	No. of the day Abau.	Day of the month.						
20	10	13	Yaxkin.	8	13	Uo.	6	18	Muan.	4	18	Yax.	2	18	Tzec.	20	13	Uayeb.	11	3	Kankin.	9	3	Chen.	7	3	Zotz.	5	8	Kayab.	20			
1	6	8	"	4	8	"	2	13	"	13	13	"	11	13	"	1	9	Cumhu.	7	18	Mae.	5	18	Mol.	3	18	Zip.	1	3	"	1			
2	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	2	5	13	"	3	13	"	1	13	"	"	"	12	13	Pax.	2			
3	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"	3	1	8	"	12	8	"	10	8	"	"	"	8	13	"	3			
4	7	13	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.	4	10	3	"	8	3	"	6	3	"	"	"	4	3	"	4			
5	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	5	6	18	Kayab.	4	18	Ceh.	2	18	Yaxkin.	13	18	Uo.	11	3	"	5		
6	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	6	2	13	"	13	13	"	11	13	"	"	"	9	13	Muan.	6			
7	8	18	Tzec.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"	7	11	8	"	9	8	"	7	8	"	"	"	5	8	"	7			
8	4	12	"	2	18	Cumhu.	13	18	Mae.	11	18	Mol.	9	18	Zip.	8	7	3	"	5	3	"	3	3	"	"	"	1	3	"	12	8		
9	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"	9	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	9		
10	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"	10	12	13	"	10	13	"	8	13	"	"	"	6	13	"	4	18	Kankin.	10
11	5	18	Zotz.	3	3	"	1	3	"	12	3	"	10	3	"	11	8	8	"	6	8	"	4	8	"	"	"	2	8	"	13	13	"	11
12	1	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	12	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.	5	3	"	13	13	13
13	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"	13	9	13	"	7	13	"	5	13	"	Cumhu.	3	18	Mae.	1	18	"	14	
14	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	14	5	8	"	3	8	"	1	8	"	"	"	12	13	"	10	13	"	15
15	2	18	Zip.	13	3	"	11	3	"	9	3	"	7	3	"	15	1	3	"	12	3	"	10	3	"	"	"	8	8	"	6	8	"	16
16	11	13	"	9	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.	16	10	18	"	8	18	Chen.	6	18	Zotz.	4	3	"	2	3	"	17		
17	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	17	6	13	Kankin.	8	18	"	2	13	"	"	"	13	18	Kayab.	11	18	Ceh.	18
18	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	18	2	8	"	4	13	"	11	8	"	"	"	9	13	"	7	13	"	19
19	12	18	Uo.	10	3	"	8	3	"	6	3	"	4	3	"	19	2	8	"	13	8	"	11	8	"	"	"	"	7	13	"	19		

ARCHAIC CHRONOLOGICAL CALENDAR.

7TH CYCLE.]

FIFTY-FIFTH GREAT CYCLE.

	10			11			12			13			14			15			16			17			18			19		
	10			11			12			13			14			15			16			17			18			19		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	3	8	Ceh.	1	8	Yaxkin.	12	8	Uo.	10	13	Muan.	3	13	Yax.	6	13	Tzec.	4	18	Cunhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.
1	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	7	13	"
2	8	18	Zac.	6	18	Xul.	4	18	Pop.	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"
3	4	13	"	2	13	"	13	13	"	11	18	Kankin.	9	18	Chen.	7	18	Zetz.	5	3	"	3	3	"	1	3	"	12	3	"
4	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.
5	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	13	"
6	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	8	"
7	1	13	"	12	13	"	10	18	Cumhu.	8	18	Mac.	6	18	Mol.	2	18	Zip.	2	3	"	13	3	"	11	3	"	9	3	"
8	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Pax.	9	18	Zac.	7	18	Xul.	5	18	Pop.
9	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"
10	2	18	Chen.	13	18	Zetz.	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"
11	11	13	"	9	13	"	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	"	10	3	"	8	3	"	6	3	"
12	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.
13	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	11	18	Cumhu.
14	12	18	Mol.	10	18	Zip.	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"
15	8	13	"	6	13	"	4	18	Pax.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"
16	4	8	"	2	8	"	13	13	"	11	13	"	9	13	"	7	13	"	5	18	Kankin.	3	18	Chen.	1	18	Zetz.	12	3	"
17	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	8	18	Kayab.
18	9	18	Yaxkin.	7	18	Uo.	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	4	13	"
19	5	13	"	3	13	"	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	3	Uayeb.	6	3	"	4	3	"	2	3	"	13	8	"

ARCHAIC CHRONOLOGICAL CALENDAR.

8TH CYCLE.]

FIFTY-FIFTH GREAT CYCLE.

20				1			2			3			4			5			6			7			8			9		
Name of month.				Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.			Name of month.		
Day of the month.				Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.		
No. of the day Ahan.				No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.			No. of the day Ahan.		
20	9	3	Kayab.	7	3	Ceh.	5	3	Yaxkin.	3	3	Uo.	1	8	Muan.	12	8	Yax.	10	8	Tzec.	9	13	Cumhu.	6	13	Mae.	4	13	Mol.
1	5	18	Pax.	3	18	Zac.	1	18	Xul.	10	3	Pop.	10	3	"	6	3	"	6	3	"	2	8	"	2	8	"	13	8	"
2	1	13	"	12	13	"	10	13	"	6	18	"	8	13	Kankin.	4	18	Chen.	2	18	Zotz.	13	3	"	11	3	"	9	3	"
3	10	8	"	6	8	"	6	8	"	2	13	"	11	8	"	13	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.
4	6	3	"	4	3	"	2	3	"	11	8	"	13	3	"	7	8	"	7	8	"	5	13	"	3	13	"	1	13	"
5	2	18	Muan.	13	18	Yax.	11	18	Tzec.	9	3	Uayeb.	3	18	"	12	3	"	3	3	"	12	8	"	10	8	"	6	3	"
6	11	13	"	9	13	"	7	13	"	3	18	Mae.	3	18	"	10	13	Mol.	12	18	Zip.	10	3	"	8	3	"	3	3	"
7	7	8	"	5	8	"	3	8	"	12	13	"	12	8	"	8	13	"	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.
8	3	3	"	12	3	"	8	3	"	6	8	"	10	8	"	4	8	"	4	8	"	2	13	"	13	13	"	11	13	"
9	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	2	18	Kayab.	13	18	Yaxkin.	9	18	Uo.	13	3	"	5	3	"	3	3	"
10	8	13	"	6	13	"	4	13	"	11	13	"	9	13	Ceh.	7	13	"	5	13	"	3	18	Muan.	1	18	Yax.	12	18	Tzec.
11	4	8	"	2	8	"	13	8	"	13	8	"	7	8	"	9	8	"	1	8	"	12	13	"	10	13	"	6	8	"
12	13	3	"	11	3	"	9	3	"	5	8	"	3	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"
13	9	18	Mae.	7	18	Mol.	5	18	Zip.	1	13	"	12	18	Pax.	10	18	Xul.	6	18	Pop.	4	3	"	2	3	"	13	3	"
14	5	13	"	3	13	"	10	13	"	6	8	"	8	13	Zac.	6	13	"	2	13	"	11	18	Kankin.	1	18	Chen.	9	18	Zotz.
15	1	8	"	12	8	"	6	8	"	4	3	"	3	8	"	2	8	"	11	8	"	7	13	"	7	13	"	5	13	"
16	10	3	"	8	3	"	4	3	"	13	3	"	4	3	"	11	3	"	11	3	"	7	8	"	9	13	"	1	8	"
17	6	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	9	18	Muan.	7	18	Tzec.	3	18	Uayeb.	1	3	"	10	3	"	6	3	"
18	2	13	"	13	13	"	11	13	"	5	18	"	3	13	"	12	13	"	3	13	"	12	18	Mae.	8	18	Mol.	6	18	Zip.
19	11	8	"	9	8	"	7	8	"	5	13	"	3	8	"	1	13	"	1	13	"	10	18	"	8	18	"	6	18	"



ARCHAIC CHRONOLOGICAL CALENDAR.

8TH CYCLE.]

FIFTY-FIFTH GREAT CYCLE.

	10			11			12			13			14			15			16			17			18			19		
	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.	Day of the month.		Name of month.
	No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.			No. of the day Ahau.		
20	2	13	Zip.	13	18	Pax.	11	18	Zac.	9	18	Xul.	7	18	Pop.	5	3	Muan.	3	3	Yax.	1	3	Tzac.	12	8	Cumhu.	10	8	Mae.
1	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	1	18	Kankin.	12	18	Chen.	10	18	Zotz.	6	3	"	6	3	"
2	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.
3	3	18	Uo.	1	3	"	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	"
4	12	13	"	10	18	Muan.	8	18	Yax.	6	18	Tzac.	4	3	Uayeb.	4	3	"	13	3	"	11	3	"	9	8	"	7	8	"
5	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Cumhu.	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"
6	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	1	18	Pax.	12	18	Zac.
7	13	18	Pop.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"	10	13	"	8	13	"
8	9	13	"	7	18	Kankin.	5	18	Chen.	3	18	Zotz.	1	3	"	12	3	"	10	3	"	8	3	"	6	8	"	4	8	"
9	5	8	"	3	13	"	1	13	"	12	13	"	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	3	"	13	3	"
10	1	3	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Muan.	9	18	Yax.
11	10	3	Uayeb.	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"
12	6	18	Cumhu.	4	18	Mac.	2	18	Mol.	13	18	Zip.	11	3	"	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"
13	2	13	"	13	13	"	11	13	"	9	13	"	7	18	Pax.	5	18	Zac.	3	18	Xul.	1	18	Pop.	12	3	"	10	3	"
14	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	12	13	"	12	13	"	10	13	"	8	18	Kankin.	6	18	Chen.
15	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"
16	3	18	Kayab.	1	18	Yaxkin.	12	18	"	10	18	Uo.	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"
17	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Muan.	13	18	Tzac.	13	18	"	11	18	Uayeb.	9	3	"	7	3	"
18	8	8	"	6	8	"	4	8	"	2	8	"	13	13	"	11	13	Yax.	13	13	"	11	13	Cumhu.	5	18	Mac.	3	18	Mol.
19	4	3	"	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"	12	13	"



9TH CYCLE.] FIFTY-FIFTH GREAT CYCLE.

20			1			2			3			4			5			6			7			8			9		
	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.	Name of month.		No. of the day Abau.		
	Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.			Day of the month.	
20	8	Mol.	6	8	Zip.	4	13	Pax.	2	13	Zac.	13	13	Xul.	20	11	13	Pop.	9	18	Kankin.	7	18	Chen.	5	18	Zetz.	3	Cumhu.
1	4	"	2	3	"	13	8	"	11	8	"	9	8	"	1	7	8	"	5	13	"	3	13	"	1	13	"	12	Kayab.
2	13	Yaxkin.	11	18	Uo.	9	3	"	7	3	"	5	3	"	3	3	3	Uayeb.	12	8	"	12	8	"	10	8	"	8	"
3	9	"	7	13	"	5	18	Muan.	3	18	Yax.	1	18	Tzec.	3	12	3	"	10	3	"	8	3	"	6	3	"	4	"
4	5	"	3	8	"	1	13	"	12	13	"	10	13	"	4	8	18	Cumhu.	6	18	Mac.	4	18	Mol.	2	18	Zip.	13	"
5	1	"	12	3	"	10	8	"	8	8	"	6	8	"	5	4	13	"	2	13	"	13	13	"	11	13	"	9	Pax.
6	10	Xul.	8	18	Pop.	6	3	"	4	3	"	2	3	"	6	13	8	"	11	8	"	7	8	"	3	8	"	5	"
7	6	"	4	13	"	2	18	Kankin.	13	18	Chen.	11	18	Zetz.	7	9	3	"	7	3	"	5	3	"	3	3	"	1	"
8	2	"	13	8	"	11	13	"	9	13	"	7	13	"	8	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	12	18	Uo.	10	"
9	11	"	9	3	"	7	8	"	5	8	"	3	8	"	9	1	13	"	12	13	"	10	13	"	8	13	"	6	Muan.
10	7	Tzec.	5	3	Uayeb.	3	3	"	1	3	"	12	3	"	10	10	8	"	8	8	"	6	8	"	4	8	"	2	"
11	3	"	1	18	Cumhu.	12	18	Mac.	10	18	Mol.	8	18	Zip.	11	6	3	"	4	3	"	2	3	"	13	3	"	11	"
12	12	"	10	13	"	8	13	"	6	13	"	4	13	"	12	2	18	Pax.	13	18	Zac.	11	18	Xul.	9	18	Pop.	7	"
13	8	"	6	8	"	4	8	"	2	8	"	13	8	"	13	11	13	"	9	13	"	7	13	"	5	13	"	3	Kankin.
14	4	18	2	3	"	13	3	"	11	3	"	9	3	"	14	7	8	"	5	8	"	3	8	"	1	8	"	12	"
15	13	"	11	18	Kayab.	9	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	15	3	3	"	1	3	"	12	3	"	10	3	"	8	"
16	9	"	7	13	"	5	13	"	3	13	"	1	13	"	16	12	18	Muan.	10	18	Yax.	8	18	Tzec.	6	3	Uayeb.	4	"
17	5	"	3	8	"	1	8	"	12	8	"	10	8	"	17	8	13	"	6	13	"	4	13	"	2	18	Cumhu.	13	Mac.
18	1	Zip.	12	3	"	10	3	"	8	3	"	6	3	"	18	4	8	"	2	8	"	13	8	"	11	13	"	9	"
19	10	"	8	18	Pax.	6	18	Zac.	4	18	Xul.	2	18	Pop.	19	13	3	"	11	3	"	9	3	"	7	8	"	5	"

	10			11			12			13			14			15			16			17			18			19		
	10			11			12			13			14			15			16			17			18			19		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	1	3	Mac.	12	3	Mol.	10	3	Zip.	8	8	Pax.	6	8	Zac.	4	8	Xul.	2	8	Pop.	13	13	Kankin.	11	13	Chen.	9	13	Zotz.
1	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.	4	3	"	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"
2	6	13	"	4	13	"	2	13	"	13	18	Muan.	11	18	Yax.	9	18	Tzec.	7	3	Uayeb.	5	3	"	3	3	"	1	3	"
3	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Cumhu.	1	18	Mac.	12	18	Mol.	10	18	Zip.
4	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"
5	7	18	Zac.	5	18	Xul.	3	18	Pop.	1	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	8	"
6	3	13	"	1	13	"	12	13	"	10	18	Kankin.	8	18	Chen.	6	18	Zotz.	4	3	"	2	3	"	13	3	"	11	3	"
7	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	18	Kayab.	11	18	Ceh.	9	18	Yaxkin.	7	18	Uo.
8	8	3	"	6	3	"	4	3	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"
9	4	18	Yax.	2	18	Tzec.	13	3	Uayeb.	11	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	8	"
10	13	13	"	11	13	"	9	18	Cumhu.	7	18	Mac.	5	18	Mol.	3	18	Zip.	1	3	"	12	3	"	10	3	"	8	3	"
11	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Pax.	8	18	Zac.	6	18	Xul.	4	18	Pop.
12	5	3	"	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"	2	13	"	13	13	"
13	1	18	Chen.	12	18	Zotz.	10	3	"	8	3	"	6	3	"	4	3	"	11	3	"	13	8	"	9	3	"	5	3	"
14	10	13	"	8	13	"	6	18	Kayab.	4	18	Ceh.	2	18	Yaxkin.	13	18	Uo.	7	18	Muan.	5	18	Yax.	3	18	Tzec.	1	3	Uayeb.
15	6	8	"	4	8	"	2	13	"	13	8	"	11	8	"	9	8	"	3	13	"	1	13	"	12	13	"	10	18	Cumhu.
16	2	3	"	13	3	"	11	8	"	9	3	"	7	3	"	5	8	"	3	13	"	1	13	"	12	13	"	8	13	"
17	11	18	Mol.	9	18	Zip.	7	3	"	5	3	"	3	3	"	1	3	"	12	8	"	10	8	"	8	8	"	6	13	"
18	7	13	"	5	13	"	3	18	Pax.	1	18	Zac.	12	18	Xul.	10	18	Pop.	8	3	"	6	3	"	4	3	"	2	8	"
19	3	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	13	"	4	18	Kankin.	2	18	Chen.	13	18	Zotz.	11	3	"

	20			1			2			3			4			5			6			7			8			9			
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.				
20	7	18	Kayab.	5	18	Ceh.	3	18	Yaxkin.	1	18	Uo.	12	3	Pax.	10	3	Zac.	8	3	Xul.	6	3	Pop.	4	8	Kankin.	2	8	Chen.	20
1	3	13	"	1	13	"	12	13	"	10	13	"	8	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	13	3	"	11	3	"	1
2	12	8	"	10	8	"	8	8	"	6	8	"	4	13	"	2	13	"	13	13	"	11	18	Cumhu.	9	18	Mac.	7	18	Mol.	2
3	8	3	"	6	3	"	4	3	"	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	3	13	"	3
4	4	18	Pax.	2	18	Zac.	13	18	Xul.	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	12	8	"	4
5	13	13	"	11	13	"	9	13	"	7	13	"	3	8	"	3	18	Chen.	1	18	Zotz.	12	3	"	8	3	"	10	3	"	5
6	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	12	13	"	10	13	"	8	18	Kayab.	6	18	Ceh.	4	18	Yaxkin.	6
7	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	6	8	"	4	8	"	4	13	"	11	8	"	13	13	"	7
8	1	18	Muan.	12	18	Yax.	10	18	Tzec.	8	18	Uayeb.	6	3	"	4	3	"	11	3	"	7	3	"	3	8	"	5	3	"	8
9	10	6	"	8	6	"	6	13	"	13	18	Cumhu.	2	18	Mac.	9	13	"	7	13	"	3	18	Pax.	5	18	Zac.	1	18	Xul.	9
10	6	8	"	4	8	"	11	13	"	13	13	"	11	13	"	10	13	"	3	13	"	5	18	"	3	18	"	12	13	"	10
11	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	3	8	"	1	13	"	1	13	"	10	13	"	11
12	11	18	Kankin.	9	18	Chen.	7	18	Zotz.	3	18	"	1	18	Ceh.	12	18	Yaxkin.	8	18	Uo.	6	3	"	10	8	"	4	3	"	12
13	7	13	"	5	13	"	12	13	"	10	13	"	8	13	"	6	13	"	4	13	"	2	18	Muan.	13	18	Yax.	11	18	Tzec.	13
14	3	8	"	1	8	"	12	8	"	6	8	"	4	8	"	13	8	"	9	8	"	11	13	"	7	13	"	3	8	"	14
15	12	3	"	10	3	"	8	3	"	4	3	"	2	3	"	11	3	"	13	3	"	2	18	"	11	13	"	9	13	"	15
16	8	18	Mac.	6	18	Mol.	4	18	Zip.	2	18	"	13	3	"	7	8	"	9	3	"	7	8	"	5	8	"	3	8	"	16
17	4	13	"	2	13	"	13	13	"	11	18	Pax.	9	18	Zac.	7	18	Xul.	5	18	Pop.	3	3	"	3	8	"	1	3	"	17
18	13	8	"	11	8	"	9	8	"	7	13	"	5	13	"	12	13	"	1	13	"	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	18
19	9	3	"	7	3	"	5	3	"	3	8	"	1	8	"	10	8	"	12	8	"	6	13	"	8	13	"	4	13	"	19



FIFTY-FIFTH GREAT CYCLE.

10TH CYCLE.]

10	11			12			13			14			15			16			17			18			19		
	11			12			13			14			15			16			17			18			19		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.
20	13	8	Zotz.	11	13	Kayab.	9	13	Ceh.	7	13	Yaxkin.	5	13	Uo.	1	18	Yax.	12	18	Tzac.	10	3	Uayeb.	8	3	Kankin.
1	9	3	"	7	8	"	5	8	"	1	8	"	12	13	"	10	13	"	8	13	"	6	18	Cumhu.	4	18	Mac.
2	5	18	Zip.	3	3	"	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"	2	13	"	13	13	"
3	1	13	"	12	18	Pax.	10	18	Zac.	8	18	Xul.	6	18	Pop.	2	3	"	13	3	"	11	8	"	9	8	"
4	10	8	"	8	13	"	4	13	"	2	13	"	13	18	Kankin.	11	18	Chen.	9	18	Zotz.	7	3	"	5	3	"
5	6	3	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"	5	13	"	3	18	Kayab.	1	18	Ceh.
6	2	18	Uo.	13	3	"	9	3	"	7	3	"	5	8	"	3	8	"	1	8	"	12	13	"	10	13	"
7	11	13	"	7	18	Yax.	5	18	Yax.	3	18	Tzac.	3	13	Uayeb.	12	3	"	10	3	"	8	8	"	6	8	"
8	7	8	"	3	13	"	12	13	"	12	18	Cumhu.	8	13	"	8	18	Mol.	6	18	Zip.	4	3	"	2	3	"
9	3	3	"	12	8	"	10	8	"	8	13	"	6	13	Mac.	4	13	"	2	13	"	13	18	Pax.	11	18	Zac.
10	12	18	Pop.	10	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"	9	13	"	7	13	"
11	8	13	"	6	18	Kankin.	4	18	Chen.	2	18	Zotz.	13	3	"	9	3	"	7	3	"	5	8	"	3	8	"
12	4	8	"	13	13	"	11	13	"	9	18	Kayab.	7	18	Ceh.	5	18	Yaxkin.	3	18	Uo.	1	3	"	12	3	"
13	13	3	"	9	8	"	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"	10	18	Muan.	8	18	Yax.
14	9	3	Uayeb.	7	3	"	5	3	"	1	8	"	12	8	"	10	8	"	8	8	"	6	13	"	4	13	"
15	5	18	Cumhu.	3	18	Mac.	1	18	Mol.	12	3	"	6	3	"	2	3	"	4	3	"	11	8	"	9	8	"
16	1	13	"	10	13	"	8	13	"	6	18	Pax.	4	18	Zac.	2	18	Xul.	13	18	Pop.	11	3	"	9	3	"
17	10	8	"	6	8	"	4	8	"	2	13	"	11	13	"	11	13	"	9	13	"	7	18	Kankin.	5	18	Chen.
18	6	3	"	2	3	"	13	3	"	11	8	"	9	8	"	7	8	"	5	8	"	3	13	"	1	13	"
19	2	18	Kayab.	13	18	Ceh.	11	18	Yaxkin.	9	18	Uo.	7	3	"	3	3	"	1	3	"	12	8	"	10	8	"

20	1			2			3			4			5			6			7			8			9		
	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.			
20	6	3	Chen.	4	3	Zotz.	2	8	Kayab.	13	8	Ceh.	11	8	Yaxkin.	7	13	Muan.	5	13	Yax.	3	13	Tzec.	1	18	Cumhu.
1	2	18	Mol.	13	18	Zip.	11	3	"	7	3	"	7	3	"	3	8	"	1	8	"	12	8	"	10	13	"
2	11	13	"	9	13	"	3	18	Pax.	3	18	Zac.	3	18	Xul.	12	3	"	10	3	"	8	3	"	6	8	"
3	7	8	"	5	8	"	1	13	"	1	13	"	12	13	"	8	18	Kankin.	6	18	Chen.	4	18	Zotz.	2	3	"
4	3	3	"	1	3	"	10	8	"	8	8	"	8	8	"	4	13	"	2	13	"	13	13	"	11	18	Kayab.
5	12	18	Yaxkin.	10	18	Uo.	6	13	"	8	3	"	6	3	"	13	8	"	11	8	"	9	8	"	7	13	"
6	8	13	"	4	13	"	2	18	Muan.	13	18	Yax.	13	18	Tzec.	9	3	"	7	3	"	5	3	"	3	8	"
7	4	8	"	2	8	"	11	13	"	5	13	"	9	13	"	7	18	Cumhu.	3	18	Mol.	1	18	Zip.	12	3	"
8	13	3	"	11	3	"	9	8	"	7	8	"	5	8	"	12	13	"	10	13	"	8	18	Pax.	8	18	"
9	9	18	Xul.	7	18	Pop.	7	18	"	5	3	"	1	3	"	10	8	"	6	8	"	4	13	"	4	13	"
10	5	13	"	3	13	"	12	18	Kankin.	12	18	Chen.	10	18	Zotz.	8	3	"	6	3	"	2	3	"	13	8	"
11	1	8	"	12	8	"	8	13	"	10	13	"	6	13	"	4	18	Kayab.	2	18	Ceh.	13	18	Yaxkin.	9	3	"
12	10	3	"	8	3	"	4	8	"	2	8	"	2	8	"	13	13	"	11	13	"	7	13	"	5	18	Muan.
13	6	18	Tzec.	4	3	Uayeb.	2	3	"	13	3	"	11	3	"	9	8	"	7	8	"	3	8	"	1	13	"
14	2	13	"	13	18	Cumhu.	11	18	Mac.	9	18	Mol.	7	18	Zip.	5	3	"	3	3	"	12	3	"	10	8	"
15	11	8	"	9	13	"	7	13	"	5	13	"	3	13	"	12	18	Zac.	10	18	Xul.	8	18	Pop.	6	3	"
16	7	3	"	5	8	"	1	8	"	12	8	"	12	8	"	6	13	"	8	13	"	4	13	"	2	18	Kankin.
17	3	18	Zotz.	1	3	"	10	3	"	8	3	"	8	3	"	2	8	"	4	8	"	13	8	"	11	13	"
18	12	13	"	10	18	Kayab.	8	18	Ceh.	6	18	Yaxkin.	4	18	Uo.	2	3	"	13	3	"	9	3	"	7	8	"
19	8	8	"	6	13	"	4	13	"	2	13	"	13	13	"	11	18	Muan.	9	18	Tzec.	5	3	Uayeb.	3	3	"

ARCHAIC CHRONOLOGICAL CALENDAR.

FIFTY-FIFTH GREAT CYCLE.

11TH CYCLE.]

10			11			12			13			14			15			16			17			18			19				
	Name of month.		No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.	No. of the day Ahau.	Day of the month.	Name of month.					
20	12	18	Mac.	10	18	Mol.	8	18	Zip.	6	3	Kayab.	4	3	Ceh.	20	2	3	Yaxkin.	13	3	Uo.	11	8	Muan.	9	8	Yax.	7	8	Tzec.
1	8	13	"	6	13	"	4	13	"	2	18	Pax.	13	18	Zac.	1	11	18	Xul.	9	18	Pop.	7	3	"	5	3	"	3	3	"
2	4	8	"	2	8	"	13	8	"	11	13	"	9	8	"	2	7	13	"	5	13	"	3	18	Kankin.	1	18	Chen.	12	18	Zotz.
3	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	3	8	"	12	13	"	12	13	"	10	13	"	8	13	"
4	9	18	Ceh.	7	18	Yaxkin.	5	18	Uo.	3	3	"	1	3	"	4	12	3	"	10	3	"	8	8	"	6	8	"	4	8	"
5	5	13	"	3	13	"	12	13	"	10	18	Muan.	10	18	Yax.	5	8	18	Tzec.	6	3	Uayeb.	4	3	"	2	3	"	13	3	"
6	1	8	"	12	8	"	10	8	"	8	13	"	6	13	"	6	4	13	"	2	18	Cumhu.	13	18	Mac.	11	18	Mol.	9	18	Zip.
7	10	3	"	8	3	"	6	3	"	2	8	"	2	8	"	7	13	8	"	11	13	"	9	13	"	7	13	"	5	13	"
8	6	18	Zac.	4	18	Xul.	2	18	Pop.	13	3	"	13	3	"	8	9	3	"	7	8	"	5	8	"	3	8	"	1	8	"
9	2	13	"	13	13	"	11	13	"	9	18	Kankin.	7	18	Chen.	9	5	18	Zotz.	3	3	"	1	3	"	12	3	"	10	3	"
10	11	8	"	9	8	"	7	8	"	5	13	"	3	13	"	10	1	13	"	12	18	Kayab.	10	18	Ceh.	8	18	Yaxkin.	6	18	Uo.
11	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	11	10	8	"	8	13	"	6	13	"	4	13	"	2	13	"
12	3	18	Yax.	1	18	Tzec.	12	3	Uayeb.	10	3	"	8	3	"	12	6	3	"	4	8	"	2	8	"	13	8	"	11	8	"
13	12	13	"	10	13	"	6	18	Cumhu.	6	18	Mac.	4	18	Mol.	13	2	18	Zip.	13	3	"	11	3	"	9	3	"	7	3	"
14	8	8	"	6	8	"	2	13	"	2	13	"	13	13	"	14	11	13	"	9	18	Pax.	7	18	Zac.	5	18	Xul.	3	18	Pop.
15	4	3	"	2	3	"	11	8	"	13	8	"	9	8	"	15	7	8	"	5	13	"	3	13	"	1	13	"	12	13	"
16	13	18	Chen.	11	18	Zotz.	9	3	"	7	3	"	5	3	"	16	3	3	"	1	8	"	12	8	"	10	8	"	8	8	"
17	9	13	"	7	13	"	5	18	Kayab.	3	18	Ceh.	1	18	Yaxkin.	17	12	18	Uo.	10	3	"	8	3	"	6	3	"	4	3	"
18	5	8	"	3	8	"	12	13	"	12	13	"	10	13	"	18	8	13	"	6	18	Muan.	4	18	Yax.	2	18	Tzec.	13	3	Uayeb.
19	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	19	4	8	"	2	13	"	13	13	"	11	13	"	9	18	Cumhu.



20				1			2			3			4			5			6			7			8			9		
Name of month.		Day of the month.	No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.	Day of the month.		No. of the day Ahau.	Day of the month.		Name of month.
20	Cumhu.	13	5	Mac.	13	3	1	Mol.	13	1	12	Zip.	13	10	6	Zac.	18	8	Xul.	18	6	Pop.	18	4	Muan.	3	2	Yax.	3	13
1	"	8	1	"	8	10	7	"	8	6	13	"	13	6	13	"	4	"	"	13	2	"	13	13	Kankin.	11	11	Chen.	18	9
2	"	3	10	"	3	6	2	"	3	2	8	"	2	11	11	"	13	"	"	8	9	"	9	5	"	7	5	"	13	5
3	Kayab.	18	6	Ceh.	18	4	2	Yaxkin.	18	13	13	Uo.	18	11	7	"	3	"	"	3	9	"	5	1	"	3	3	"	8	1
4	"	13	2	"	13	11	7	"	13	9	13	"	18	3	3	Yax.	18	5	Tzec.	18	3	Uayeb.	3	1	"	3	12	"	3	10
5	"	8	11	"	8	7	3	"	8	1	8	"	"	12	8	"	10	"	"	13	6	Cumhu.	18	10	Mac.	18	8	Mol.	18	6
6	"	3	7	"	3	3	10	"	3	6	10	"	"	4	3	"	8	"	"	8	8	"	6	2	"	4	13	"	13	2
7	Pax.	18	3	Zac.	18	8	6	Xul.	18	13	13	Pop.	18	8	3	"	3	"	"	3	4	"	11	3	"	9	13	"	8	11
8	"	13	12	"	13	4	13	"	13	6	13	"	"	13	13	Chen.	18	2	Zotz.	18	13	"	7	18	Ceh.	5	18	Yaxkin.	18	3
9	"	8	8	"	8	4	11	"	8	11	7	"	"	9	5	"	11	"	"	8	5	"	3	13	"	10	8	"	12	12
10	"	3	4	"	3	13	7	"	3	11	3	"	"	5	1	"	7	"	"	3	1	"	12	8	"	8	8	"	8	8
11	Muan.	18	13	Yax.	18	9	12	Tzec.	18	3	3	Uayeb.	18	7	3	"	12	18	Zip.	18	10	Cumhu.	3	12	Mac.	18	6	"	3	4
12	"	13	9	"	13	5	5	"	13	3	13	"	"	1	10	Mol.	18	12	"	13	6	"	8	4	"	6	3	"	4	6
13	"	8	5	"	8	1	8	"	8	8	4	"	"	10	8	"	8	"	"	13	2	"	13	4	"	11	13	"	13	15
14	"	3	1	"	3	10	10	"	3	13	13	"	"	6	2	"	4	"	"	8	11	"	13	9	"	7	8	"	5	9
15	Kankin.	18	10	Chen.	18	8	6	Zotz.	18	4	3	"	"	13	13	"	11	"	"	3	7	"	9	5	"	3	7	"	1	10
16	"	13	6	"	13	2	2	"	13	13	18	Kayab.	18	11	7	Yaxkin.	18	9	Uo.	18	7	"	5	3	"	3	3	"	1	1
17	"	8	2	"	8	13	11	"	8	9	13	"	"	7	13	"	5	"	"	13	3	Muan.	18	1	Yax.	18	12	Tzec.	18	10
18	"	3	11	"	3	3	7	"	3	5	8	"	"	3	8	"	1	"	"	8	12	"	10	13	"	8	13	"	6	6
19	Mac.	18	7	Mol.	18	5	3	Zip.	18	3	3	"	"	12	3	"	10	"	"	3	8	6	"	6	"	4	8	"	2	2

10				11			12			13			14			15			16			17			18			19			
		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.		Name of month.		Day of the month.		No. of the day Abau.	
20	11	3	Tzec.	9	8	Cumhu.	7	8	Mac.	5	8	Mol.	3	8	Zip.	12	13	Pax.	12	13	Zac.	10	13	Xul.	8	13	Pop.	6	18	Kankin.	20
1	7	18	Zotz.	5	3	"	3	3	"	1	3	"	12	3	"	10	8	"	8	8	"	6	8	"	4	8	"	2	13	"	1
2	3	13	"	1	18	Kayab.	12	18	Ceh.	10	18	Yaxkin.	8	18	Uo.	4	3	"	4	3	"	2	3	"	11	3	"	13	8	"	2
3	12	8	"	10	13	"	6	13	"	6	13	"	4	13	"	3	18	Muan.	13	18	Yax.	11	18	Tzec.	9	3	Uayeb.	7	3	"	3
4	8	3	"	6	8	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	7	13	"	5	18	Cumhu.	3	18	Mac.	4
5	4	18	Zip.	2	3	"	13	3	"	11	3	"	9	3	"	7	8	"	5	8	"	3	8	"	10	8	"	12	13	"	5
6	13	13	"	11	18	Pax.	9	18	Zac.	7	18	Xul.	5	18	Pop.	1	3	"	1	3	"	12	3	"	10	8	"	6	3	"	6
7	9	8	"	7	13	"	5	13	"	3	13	"	1	13	"	12	18	Kankin.	10	18	Chen.	8	18	Zotz.	6	3	"	4	3	"	7
8	5	3	"	3	8	"	1	8	"	12	8	"	10	8	"	4	13	"	6	13	"	4	13	"	13	8	"	2	18	Kayab.	8
9	1	18	Uo.	12	3	"	10	3	"	8	3	"	6	3	"	4	8	"	2	8	"	13	8	"	11	13	"	9	13	"	9
10	10	13	"	8	18	Muan.	6	18	Yax.	4	18	Tzec.	2	3	Uayeb.	11	3	"	11	3	"	7	8	"	9	3	"	5	8	"	10
11	6	8	"	4	13	"	2	13	"	13	13	"	7	13	Cumhu.	9	18	Mac.	3	13	"	5	18	Zip.	6	3	"	3	3	"	11
12	2	3	"	13	8	"	11	8	"	9	8	"	7	13	"	12	13	"	12	13	"	1	13	"	10	8	"	8	13	"	12
13	11	18	Pop.	9	3	"	7	3	"	5	3	"	3	8	"	12	8	"	12	8	"	10	8	"	6	13	"	8	13	"	13
14	7	13	"	5	18	Kankin.	3	18	Chen.	1	18	Zotz.	12	3	"	8	18	"	8	3	"	6	3	"	10	8	"	4	8	"	14
15	3	8	"	1	13	"	12	13	"	10	13	"	8	18	Kayab.	4	18	Ceh.	4	18	Yaxkin.	2	18	Uo.	13	3	"	11	3	"	15
16	12	3	"	10	8	"	8	8	"	6	8	"	4	13	"	13	13	"	13	13	"	11	13	"	9	18	Muan.	7	18	Yax.	16
17	8	3	Uayeb.	6	3	"	4	3	"	2	3	"	13	8	"	7	8	"	9	8	"	7	8	"	5	13	"	3	13	"	17
18	4	18	Cumhu.	2	18	Mac.	13	18	Mol.	11	18	Zip.	9	3	"	7	3	"	5	3	"	3	3	"	1	8	"	12	8	"	18
19	13	13	"	11	13	"	9	13	"	7	13	"	5	18	Pax.	3	18	Zac.	1	18	Xul.	12	18	Pop.	10	3	"	8	3	"	19





# PERPETUAL CHRONOLOGICAL CALENDAR.

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THIS calendar enables us to determine the position in the grand era of any date where the number of the ahau and katun, or of the katun only, is given. Take, for instance, the important date 9—15—20—18×20—4 Ahau-13 Yax. We know here that it is in a ninth cycle, but will assume that we do not. There are no days, chuens, or ahaus in this date—the extreme numeral or each of these periods indicating it to be the beginning of an initial one—so we turn at once to the table of katuns to find where 4 Ahau-13 Yax occurs. We discover it to be the beginning of the first katun in the first column. But, as we know it to be the fifteenth katun of a cycle, we must count backward fifteen katuns. This we do, beginning at the bottom of the thirteenth column. Counting upward fifteen we come to 8 Ahau-13 Ceh, the beginning of the cycle. Going with this date to the cycle table we find it in the tenth column, and discover that it occurs in the 9th cycle of the great cycle beginning with 4 Ahau-8 Cumhu (every figure of 4 in the cycle table is the beginning of a great cycle). With 4 Ahau-8 Cumhu we go to the great cycle table and find that the great cycle beginning with that date is the 54th. Thus we have ascertained the full date to be 54—9—15—20—18×20—4 Ahau-13 Yax.

Or take the initial date of the Temple of the Sun at Palenque. It is 1—18—5—3 ×6—13 Cimi-19 Ceh. Here we have ahaus, chuens, and days. We first refer to the Annual Calendar to find 13 Cimi-19 Ceh, and, going back 3 chuens and 6 days—or 66 days—come to 12 Ahau-13 Chen, the beginning of the fifth ahau. We then turn to the ahau table of the Perpetual Calendar for that date, and, counting back five ahaus, arrive at 6 Ahau-18 Yax, the beginning of the katun. With that date we go to the katun table, and, counting back eighteen katuns from it, come to 3 Ahau-13 Chen, the beginning of the cycle. Taking that date to the cycle table we find it belongs to the first cycle of the grand cycle beginning with 4 Ahau-8 Cumhu. We know where we are now, from the preceding trial. The date is in the same great cycle as the other, but they are more than three thousand years apart.

GREAT CYCLES.			CYCLES.																			
	Abau.	Month.	Ahau.													Month.						
			1	2	3	4	5	6	7	8	9	10	11	12	13		1	2	3	4	5	6
73	4	13 Yax.	13	4	9	1	6	11	3	8	13	5	10	2	7	12	13 Yax.	20	4	1	11	8
1	4	8 Xul.	1	3	8	13	5	10	2	7	12	4	9	1	6	11	18 Pop.	1	2	12	9	6
2	4	3 Uo.	2	2	7	12	4	9	1	6	11	3	8	13	5	10	8 Zac.	2	13	10	7	4
3	4	3 Pax.	3	1	6	11	3	8	13	5	10	2	7	12	4	9	13 Uo.	3	11	8	5	2
4	4	18 Zac.	4	13	5	10	2	7	12	4	9	1	6	11	3	8	3 Ceh.	4	9	6	3	13
5	4	13 Yaxkin.	5	12	4	9	1	6	11	3	8	13	5	10	2	7	8 Zip.	5	7	4	1	11
6	4	8 Zip.	6	11	3	8	13	5	10	2	7	12	4	9	1	6	18 Ceh.	6	5	2	12	9
7	4	8 Kayab.	7	10	2	7	12	4	9	1	6	11	3	8	13	5	3 Zotz.	7	3	13	10	7
8	4	3 Mac.	8	9	1	6	11	3	8	13	5	10	2	7	12	4	13 Mac.	8	1	11	8	5
9	4	18 Mol.	9	8	13	5	10	2	7	12	4	9	1	6	11	3	18 Zotz.	9	12	9	6	3
10	4	13 Zetz.	10	7	12	4	9	1	6	11	3	8	13	5	10	2	8 Kankin.	10	10	7	4	1
11	4	13 Cumhu.	11	6	11	3	8	13	5	10	2	7	12	4	9	1	13 Tzee.	11	8	5	2	12
12	4	8 Kankin.	12	5	10	2	7	12	4	9	1	6	11	3	8	13	3 Muan.	12	6	3	13	10
13	4	3 Yax.	13	4	9	1	6	11	3	8	13	5	10	2	7	12	8 Xul.	13	4	1	11	8
14	4	18 Tzee.	1	3	8	13	5	10	2	7	12	4	9	1	6	11	18 Muan.	14	2	12	9	6
15	4	13 Pop.	2	2	7	12	4	9	1	6	11	3	8	13	5	10	3 Yaxkin.	15	13	10	7	4
16	4	13 Muan.	3	1	6	11	3	8	13	5	10	2	7	12	4	9	13 Pax.	16	11	8	5	2
17	4	8 Zac.	4	13	5	10	2	7	12	4	9	1	6	11	3	8	18 Yaxkin.	17	9	6	3	13
18	4	3 Yaxkin.	5	12	4	9	1	6	11	3	8	13	5	10	2	7	8 Kayab.	18	7	4	1	11
19	4	18 Uo.	6	11	3	8	13	5	10	2	7	12	4	9	1	6	13 Mol.	19	5	2	12	9
20	4	18 Pax.	7	10	2	7	12	4	9	1	6	11	3	8	13	5	3 Cumhu.	20	3	13	10	7
21	4	13 Ceh.	8	9	1	6	11	3	8	13	5	10	2	7	12	4	8 Chen.	1	1	11	8	5
22	4	8 Mol.	9	8	13	5	10	2	7	12	4	9	1	6	11	3	18 Cumhu.	2	12	9	6	3
23	4	3 Zotz.	10	7	12	4	9	1	6	11	3	8	13	5	10	2	3 Yax.	3	10	7	4	1
24	4	3 Cumhu.	11	6	11	3	8	13	5	10	2	7	12	4	9	1	8 Pop.	4	8	5	2	12
25	4	18 Mac.	12	5	10	2	7	12	4	9	1	6	11	3	8	13	18 Yax.	5	6	3	13	10
26	4	13 Chen.	13	4	9	1	6	11	3	8	13	5	10	2	7	12	3 Uo.	6	4	1	11	8
27	4	8 Tzee.	1	3	8	13	5	10	2	7	12	4	9	1	6	11	13 Zac.	7	2	12	9	6
28	4	3 Pop.	2	2	7	12	4	9	1	6	11	3	8	13	5	10	18 Uo.	8	13	10	7	4
29	4	3 Muan.	3	1	6	11	3	8	13	5	10	2	7	12	4	9	8 Ceh.	9	11	8	5	2
30	4	18 Yax.	4	13	5	10	2	7	12	4	9	1	6	11	3	8	13 Zip.	10	9	6	3	13
31	4	13 Xul.	5	12	4	9	1	6	11	3	8	13	5	10	2	7	3 Mac.	11	7	4	1	11
32	4	8 Uo.	6	11	3	8	13	5	10	2	7	12	4	9	1	6	8 Zotz.	12	5	2	12	9
33	4	8 Pax.	7	10	2	7	12	4	9	1	6	11	3	8	13	5	18 Mac.	13	3	13	10	7
34	4	3 Ceh.	8	9	1	6	11	3	8	13	5	10	2	7	12	4	3 Tzee.	14	1	11	8	5
35	4	18 Yaxkin.	9	8	13	5	10	2	7	12	4	9	1	6	11	3	13 Kankin.	15	12	9	6	3
36	4	13 Zip.	10	7	12	4	9	1	6	11	3	8	13	5	10	2	18 Tzee.	16	10	7	4	1
37	4	13 Kayab.	11	6	11	3	8	13	5	10	2	7	12	4	9	1	8 Muan.	17	8	5	2	12
38	4	8 Mac.	12	5	10	2	7	12	4	9	1	6	11	3	8	13	13 Xul.	18	6	3	13	10
39	4	3 Chen.	13	4	9	1	6	11	3	8	13	5	10	2	7	12	3 Pax.	19	4	1	11	8
40	4	18 Zetz.	1	3	8	13	5	10	2	7	12	4	9	1	6	11	8 Yaxkin.	20	2	12	9	6
41	4	18 Cumhu.	2	2	7	12	4	9	1	6	11	3	8	13	5	10	13 Pax.	1	13	10	7	4
42	4	13 Kankin.	3	1	6	11	3	8	13	5	10	2	7	12	4	9	3 Mol.	2	11	8	5	2
43	4	8 Yax.	4	13	5	10	2	7	12	4	9	1	6	11	3	8	13 Kayab.	3	9	6	3	13
44	4	3 Xul.	5	12	4	9	1	6	11	3	8	13	5	10	2	7	18 Mol.	4	7	4	1	11
45	4	18 Pop.	6	11	3	8	13	5	10	2	7	12	4	9	1	6	8 Cumhu.	5	5	2	12	9
46	4	18 Muan.	7	10	2	7	12	4	9	1	6	11	3	8	13	5	13 Chen.	6	3	13	10	7
47	4	13 Zac.	8	9	1	6	11	3	8	13	5	10	2	7	12	4	3 Uayeb.	7	1	11	8	5
48	4	8 Yaxkin.	9	8	13	5	10	2	7	12	4	9	1	6	11	3	8 Yax.	8	12	9	6	3
49	4	3 Zip.	10	7	12	4	9	1	6	11	3	8	13	5	10	2	13 Pop.	9	10	7	4	1
50	4	3 Kayab.	11	6	11	3	8	13	5	10	2	7	12	4	9	1	3 Zac.	10	8	5	2	12
51	4	18 Ceh.	12	5	10	2	7	12	4	9	1	6	11	3	8	13	8 Uo.	11	6	3	13	10
52	4	13 Mol.	13	4	9	1	6	11	3	8	13	5	10	2	7	12	18 Zac.	12	4	1	11	8
53	4	8 Zotz.	1	3	8	13	5	10	2	7	12	4	9	1	6	11	3 Zip.	13	2	12	9	6
54	4	8 Cumhu.	2	2	7	12	4	9	1	6	11	3	8	13	5	10	13 Ceh.	14	13	10	7	4
55	4	3 Kankin.	3	1	6	11	3	8	13	5	10	2	7	12	4	9	18 Zip.	15	11	8	5	2
56	4	18 Chen.	4	13	5	10	2	7	12	4	9	1	6	11	3	8	8 Mac.	16	9	6	3	13
57	4	13 Tzee.	5	12	4	9	1	6	11	3	8	13	5	10	2	7	13 Zotz.	17	7	4	1	11
58	4	8 Pop.	6	11	3	8	13	5	10	2	7	12	4	9	1	6	3 Kankin.	18	5	2	12	9
59	4	8 Muan.	7	10	2	7	12	4	9	1	6	11	3	8	13	5	8 Tzee.	19	3	13	10	7
60	4	3 Zac.	8	9	1	6	11	3	8	13	5	10	2	7	12	4	18 Kankin.	20	1	11	8	5
61	4	18 Xul.	9	8	13	5	10	2	7	12	4	9	1	6	11	3	3 Xul.	1	12	9	6	3
62	4	13 Uo.	10	7	12	4	9	1	6	11	3	8	13	5	10	2	13 Muan.	2	10	7	4	1
63	4	13 Pax.	11	6	11	3	8	13	5	10	2	7	12	4	9	1	18 Xul.	3	8	5	2	12
64	4	8 Ceh.	12	5	10	2	7	12	4	9	1	6	11	3	8	13	8 Pax.	4	6	3	13	10
65	4	3 Mol.	13	4	9	1	6	11	3	8	13	5	10	2	7	12	13 Yaxkin.	5	4	1	11	8
66	4	18 Zip.	1	3	8	13	5	10	2	7	12	4	9	1	6	11	3 Kayab.	6	2	12	9	6
67	4	18 Kayab.	2	2	7	12	4	9	1	6	11	3	8	13	5	10	8 Mol.	7	13	10	7	4
68	4	13 Mac.	3	1	6	11	3	8	13	5	10	2	7	12	4	9	18 Kayab.	8	11	8	5	2
69	4	8 Chen.	4	13	5	10	2	7	12	4	9											



# LOGICAL CALENDAR.

KATUNS.													AHAUS.																									
Ahau.													Month.	Ahau.													Month.											
6	7	8	9	10	11	12	13	1	2	3	4	5		6	7	8	9	10	11	12	13																	
2	12	9	6	3	13	10	7	13	Yax.	20	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	13	Yax.									
13	10	7	4	1	11	8	5	13	Tzec.	1	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	8									
11	8	5	2	12	9	6	3	18	Cumhu.	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	3									
9	6	3	13	10	7	4	1	18	Mac.	3	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	18	Chen.								
7	4	1	11	8	5	2	12	18	Mol.	4	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	13	8								
5	2	12	9	6	3	13	10	18	Zip.	5	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	8								
3	13	10	7	4	1	11	8	3	Kayab.	6	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	3								
1	11	8	5	2	12	9	6	3	Ceh.	7	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	18	Mol.							
12	9	6	3	13	10	7	4	3	Yaxkin.	8	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	13	8							
10	7	4	1	11	8	5	2	3	Uo.	9	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	13						
8	5	2	12	9	6	3	13	8	Muan.	10	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	8						
6	3	13	10	7	4	1	11	8	Yax.	11	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	18	Yaxkin.					
4	1	11	8	5	2	12	9	8	Tzec.	12	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	13						
2	12	9	6	3	13	10	7	13	Cumhu.	13	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	18	Yaxkin.				
13	10	7	4	1	11	8	5	13	Mac.	14	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	13					
11	8	5	2	12	9	6	3	13	Mol.	15	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	18	Xul.			
9	6	3	13	10	7	4	1	13	Zip.	16	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	11	13				
7	4	1	11	8	5	2	12	18	Pax.	17	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	13	8				
5	2	12	9	6	3	13	10	18	Zac.	18	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	3				
3	13	10	7	4	1	11	8	18	Xul.	19	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	18	Tzec.			
1	11	8	5	2	12	9	6	18	Pop.	20	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	13			
12	9	6	3	13	10	7	4	3	Muan.	1	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	10	4	8		
10	7	4	1	11	8	5	2	3	Yax.	2	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	3	
8	5	2	12	9	6	3	13	3	Tzec.	3	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	18	Zotz.
6	3	13	10	7	4	1	11	8	Cumhu.	4	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	13	
4	1	11	8	5	2	12	9	8	Mac.	5	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	
2	12	9	6	3	13	10	7	8	Mol.	6	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	3	
13	10	7	4	1	11	8	5	8	Zip.	7	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	18	Zip.
11	8	5	2	12	9	6	3	13	Pax.	8	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	13	
9	6	3	13	10	7	4	1	13	Zac.	9	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	8	
7	4	1	11	8	5	2	12	13	Xul.	10	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	3	
5	2	12	9	6	3	13	10	13	Pop.	11	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	18	Uo.
3	13	10	7	4	1	11	8	18	Kankin.	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	13	
1	11	8	5	2	12	9	6	18	Chen.	13	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	8	
12	9	6	3	13	10	7	4	18	Zotz.	14	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	3	
10	7	4	1	11	8	5	2	3	Cumhu.	15	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	18	Pop.
8	5	2	12	9	6	3	13	3	Mac.	16	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	13	
6	3	13	10	7	4	1	11	3	Mol.	17	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	8	
4	1	11	8	5	2	12	9	3	Zip.	18	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	3	
2	12	9	6	3	13	10	7	8	Pax.	19	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	3	Uayeb.
13	10	7	4	1	11	8	5	8	Zac.	20	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	18	Cumhu.
11	8	5	2	12	9	6	3	8	Xul.	1	9	3	10	4	11	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7	1	8	2	13	
9	6	3	13	10	7	4	1	8	Pop.	2	5	12	6	13	7	1	8	2	9	3	10	4	11	5	12	6	13	7										





## WORKING-CHART.

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THIS chart will be found invaluable in working out chronological problems. It will obviate a discouraging amount of figuring, for nearly every factor that can enter into such problems is here ready reckoned in days. A single example will sufficiently illustrate its use.

On the tablet of the Temple of the Sun, Palenque, is this record: 9—12—18—5×16, followed almost immediately by 4 Ahau-8 (the month symbol is new and unrecognizable), and that, with but a single intervening glyph, by 2 Cib-14 Mol. Two questions naturally arise—what is the unknown month sign? and do these cycles, katuns, ahaus, chuens, and days represent the period between these dates? Cib being the sixteenth day from Ahau gives probability to the conjecture. Let us cipher it out, thereby testing the utility of our working-chart. By its help we readily reduce the period to days, thus:—

9 cycles	=	1,296,000	days.
12 katuns	=	86,400	„
18 ahaus	=	6,480	„
5 chuens	=	100	„
16 days	=	16	„

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1,388,996 days.

From these we deduct as many calendar rounds as possible, being seventy-three, or 1,385,540 days, leaving 3,456. From these we take 155, the number of days from the beginning of the year to 14 Mol—that being the only date we are certain of. This leaves 3,301 days. From these deduct all the years possible, being nine, or 3,285 days. There are now but 16 days left. Reckoning back from the end of the year, we find these reach to 8 Cumhu—a circumstance that enables us easily to recognize the strange sign as a variant of the symbol for that month. Turning now to the Annual Calendar, we find that 4 Ahau-8 Cumhu occurs on page 7, and, passing over nine years till we come to page 17, we find that 2 Cib falls on the 14th of Mol in that year. Thus we are satisfied that the strange month sign is a symbol for Cumhu, and that the cycles, katuns, ahaus, chuens, and days represent the period between the two dates—the full reading being: “9—12—18—5×16, from 4 Ahau-8 Cumhu, the beginning of the great cycle, to 2 Cib-14 Mol”; and, by the help of the working-table, we have accomplished our purpose with a comparatively small amount of ciphering.

# WORKING-CHART.—PERIODS REDUCED TO DAYS.

CALENDAR ROUNDS.				CHUENS.		KATUNS.		MONTH DATES OF THE DAYS.																	
								20	1	2	3	4													
								5	6	7	8	9													
								10	11	12	13	14													
								15	16	17	18	19													
								Ik.	Akbal.	Kan.	Chiechan.	Cimi.													
								Manik.	Lamat.	Muluc.	Oc.	Chuen.													
								Eb.	Ben.	Ix.	Men.	Cib.													
								Caban.	Ezenab.	Cauac.	Ahau.	Ymix.													
1	18,930	41	778,180	1	20	1	7,200																		
2	37,960	42	797,160	2	40	2	14,400																		
3	56,940	43	816,140	3	60	3	21,600																		
4	75,920	44	835,120	4	80	4	28,800																		
5	94,900	45	854,100	5	100	5	36,000																		
6	113,880	46	873,080	6	120	6	43,200																		
7	132,860	47	892,060	7	140	7	50,400																		
8	151,840	48	911,040	8	160	8	57,600																		
9	170,820	49	930,020	9	180	9	64,800																		
10	189,800	50	949,000	10	200	10	72,000																		
11	208,780	51	967,980	11	220	11	79,200																		
12	227,760	52	986,960	12	240	12	86,400																		
13	246,740	53	1,005,940	13	260	13	93,600																		
14	265,720	54	1,024,920	14	280	14	100,800																		
15	284,700	55	1,043,900	15	300	15	108,000																		
16	303,680	56	1,062,880	16	320	16	115,200																		
17	322,660	57	1,081,860	17	340	17	122,400																		
18	341,640	58	1,100,840	18	360	18	129,600																		
19	360,620	59	1,119,820			19	136,800																		
20	379,600	60	1,138,800	AHAUS.		20	144,000																		
21	398,580	61	1,157,780	1	360																				
22	417,560	62	1,176,760	2	720																				
23	436,540	63	1,195,740	3	1,080																				
24	455,520	64	1,214,720	4	1,440																				
25	474,500	65	1,233,700	5	1,800																				
26	493,480	66	1,252,680	6	2,160																				
27	512,460	67	1,271,660	7	2,520																				
28	531,440	68	1,290,640	8	2,880	1	144,000																		
29	550,420	69	1,309,620	9	3,240	2	288,000																		
30	569,400	70	1,328,600	10	3,600	3	432,000																		
31	588,380	71	1,347,580	11	3,960	4	576,000																		
32	607,360	72	1,366,560	12	4,320	5	720,000																		
33	626,340	73	1,385,540	13	4,680	6	864,000																		
34	645,320	74	1,404,520	14	5,040	7	1,008,000																		
35	664,300	75	1,423,500	15	5,400	8	1,152,000																		
36	683,280	76	1,442,480	16	5,760	9	1,296,000																		
37	702,260	77	1,461,460	17	6,120	10	1,440,000																		
38	721,240	78	1,480,440	18	6,480	11	1,584,000																		
39	740,220	79	1,499,420	19	6,840	12	1,728,000																		
40	759,200	80	1,518,400	20	7,200	13	1,872,000																		
								ORDER OF THE MONTHS.																	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
								Pop.	Uo.	Zip.	Zotz.	Tzec.	Xul.	Yaxkin.	Mol.	Chen.	Yax.	Zac.	Ceh.	Mac.	Kankin.	Muan.	Pax.	Kayab.	Cumhu.
								18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
								YEARS.																	
								1	365	27	9,855														
								2	730	28	10,220														
								3	1,095	29	10,535														
								4	1,460	30	10,950														
								5	1,825	31	11,315														
								6	2,190	32	11,680														
								7	2,555	33	12,045														
								8	2,920	34	12,410														
								9	3,285	35	12,775														
								10	3,650	36	13,140														
								11	4,015	37	13,505														
								12	4,380	38	13,870														
								13	4,745	39	14,235														
								14	5,110	40	14,600														
								15	5,475	41	14,965														
								16	5,840	42	15,330														
								17	6,205	43	15,695														
								18	6,570	44	16,060														
								19	6,935	45	16,425														
								20	7,300	46	16,790														
								21	7,665	47	17,155														
								22	8,030	48	17,520														
								23	8,395	49	17,885														
								24	8,760	50	18,250														
								25	9,125	51	18,615														
								26	9,490	52	18,980														











